

University of Ljubljana  
Veterinary Faculty



# Self Evaluation Report

University of Ljubljana, Veterinary Faculty

Ljubljana, Slovenija

2020



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# Introduction

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## Brief history of the Veterinary Faculty

The Veterinary Faculty (VFLJ) is one of the members of the University of Ljubljana (UL), which was established in 1919. UL is a university with 50,000 undergraduate and postgraduate students, with over 300 different undergraduate and postgraduate study programmes. It employs approximately 6,000 employees in 23 faculties and 3 arts academies. It is also the central and largest research institution in Slovenia with 30 percent of all registered researchers.

VFLJ was established in 1953. In 1956, the first veterinary students enrolled on the veterinary programme, which at that time was organised as the department of the Faculty for Agronomy, Forestry and Veterinary Medicine (in 1961 it was renamed as the Biotechnical Faculty). Since 1990, VFLJ has been an independent faculty member of the UL. It is the only faculty in Slovenia that educates veterinary students at all levels of higher education.

## Main features of the Veterinary Faculty

The activities of the VFLJ are aimed at educational, research and expert services. In 2001, the National Veterinary Institute (NVI) became an organisational unit of the VFLJ. NVI performs activities of the official and national reference laboratories to diagnose and control animal diseases and food and feed safety. This expert practical work at the NVI offers students the possibility of additional practical training. The goal of the VFLJ is to offer students and the society established and verified educational and research programmes and to provide customers with reliable results. The status of the VFLJ is fully approved by an expert commission from the European Association of Establishments for Veterinary Education (EAEVE) since 1998, and the suitability of laboratory testing was confirmed by the accreditation in accordance with Standard ISO/EN 17025 obtained in 2002.

About 60 undergraduate places are available every year and approximately 400 students are registered at the faculty. In addition to these, there are about 80 students who do not have student status but are, according to the national legislation, entitled to study.

## Brief summary of the main developments since the last visitation

Since the last ESEVT re-visitation in March 2011, the following changes have been implemented at VFLJ:

- In 2012, advanced postgraduate specialty training was started in programmes for Buiatrics, Poultry health and poultry production systems, Diseases and healthcare of birds, small mammals and reptiles, Small animal veterinary medicine and Veterinary public health and food.
- In 2015, the Slovenian Quality Assurance Agency for Higher Education (Nacionalna agencija za kakovost visokega šolstva - NAKVIS) approved the study programmes at VFLJ. UL re-accreditation started in 2020 and will continue in March and April 2021.
- VFLJ has invested in new equipment and facilities. The most significant investments include a CT scanner, ultrasound systems, anaesthetic equipment, MALDI-TOF mass spectrometry, Next-Generation Sequencing, Sanger sequencing instrument, multimode microplate reader, thermocyclers for real-time PCR, and the rebuilding of stomatology, reproduction and post-mortem facilities. To improve the teaching and learning process, VFLJ purchased an interactive LED display with touch screen, a dog and a calf model to practise some skills and software for interactive models to study animal anatomy.
- In the study year 2016/2017, a new course called Welfare, ethics and legislation was introduced into the core curriculum of the 1<sup>st</sup> year study programme.
- Several new elective courses were added to the curriculum in the study year 2016/2017: Advanced practicum in pig health care; Advanced health care of small ruminants; Experimental pathophysiology and toxinology; Scientific Methods; Equine sports medicine; Equine lameness wet-lab; Honeybee society and its diseases; Aquaculture Health Management; Advanced small animal orthopaedic and neurology diagnostics; Advanced Parasitology practical course. In 2020, additional elective courses have been included, namely: Communication skills in veterinary medicine 1, Behavioral neurobiology, Use of experimental animals in research, Ruminant podiatry, Practicum in Cytopathology, Zoonoses,

Biosafety, Special bovine surgery, Emergency medicine of dogs and cats, Microbial and antimicrobial environment in veterinary medicine, Communication skills in veterinary medicine 2, Business and Entrepreneurship in Veterinary Medicine.

- The number of necropsies of exotic animals and horses was increased to reach the standards of ESEVT indicators.
- The VFLJ's organisational scheme changed in 2017, which significantly reduced the number of budgetary units (from 15 to 7).
- The stair climber was obtained to improve accessibility for people with reduced mobility. From 2015 to 2018, VFLJ participated in an Erasmus+ Programme entitled "Internal Quality Management: Evaluating and Improving Competence-Based Higher Education (IQM-HE)".
- VFLJ is currently (from 2018 and prolonged to 2021) involved in an Erasmus+ project: Pan-European soft skills curriculum for undergraduate veterinary education – SOFTVETS, where five European veterinary schools prepare the curricula for communication, digital and entrepreneurial skills for veterinary students.
- In the academic year 2020/2021 several curriculum changes approved by the UL Senate were implemented. The main proposed changes are: earlier exposure of students to animals and the clinical setting, optimisation of intramural clinical rotations, mandatory seminar/research work with public defence, mandatory final exam.
- Documents have been prepared for the construction of a new building for VFLJ.
- By the amendments to the Rules on the Internal Organization of the VFLJ three new commissions were formed as working bodies of the VFLJ Senate: The Curriculum Commission, The Commission for Biosecurity and The Commission for Welfare of Animals in Experimental Procedures.
- A working group has been set up for Special Status Students to deal with students' applications for special status and the possibility of adapting the course once special status has been obtained. Annual interviews have been introduced with external stakeholders to obtain information on their needs and on the involvement of VFLJ graduates in the work.
- The reconstruction of the animal isolation facilities was completed.

In the academic years 2019/2020 (summer semester) and 2020/2021 (winter semester) adjustments were made in the implementation of the learning and study process due to the exceptional situation of COVID-19 (Appendix 13).

### **Major problems encountered by the Veterinary Faculty**

VFLJ is aware that the building facilities will not allow for the enlargement of the study programme and alternative ways of teaching.

**Version and date of the ESEVT SOP which is valid for visitation**

Standard Operating Procedure (SOP) 2019 as approved at the Zagreb General Assembly, 30 May 2019. The presented Self-Evaluation Report was prepared by:

Assoc. Prof. Breda Jakovac Strajn, PhD

Prof. Gregor Majdič, PhD

Assoc. Prof. Ožbalt Podpečan, PhD

Assoc. Prof. Modest Vengušt, PhD

Assoc. Prof. Jelka Zabavnik Piano, PhD

Prof. Bojan Zorko, PhD

Proofread by English Proofreading and InstaText

Lay out by Luka Milčinski



Prof. Andrej Kirbiš, PhD

Dean





# Standard 1: Objectives, Organisation and QA Policy

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## Factual Information

**1.1 The Establishment must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, of adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.**

**The Establishment must develop and follow its mission statement which must embrace all the ESEVT standards.**

## Description of the mission statement, objectives and the key values

### Mission

With responsibility and respect, we create new generations of veterinary doctors, ready for the challenges of discovering new worlds, developing new treatment methods, and delivering superior services to provide conditions for animal and human health, safe food and the environment.

### Vision

We want to become one of the most reputable, established and internationally recognised educational and research institutions in Europe, embedded in near and far environments, known for the knowledge, skills and ethical standards of our veterinarians and the teachers who have educated them, researchers and non-teaching staff. We want to make a decisive impact and contribute to improving animal and human health.

## Objectives/Strategic Orientations

1. EAEVE accreditation
  2. ISO 17025 accreditation
  3. Acquisition of international research projects
  4. Involvement in international infrastructure projects
  5. Publications of research results in top international journals
  6. Increasing the internationalisation of undergraduate and postgraduate studies
  7. Involvement of successful foreign researchers and pedagogues in the work of the faculty
  8. To be an institution that sets welfare standards and a code of ethics for the treatment of animals
  9. To continue the top laboratory diagnostic and analytical activities within the National Veterinary Institute (NVI) and to maintain high standards in ensuring the concept of 'one health'
  10. Continuous training of employees to ensure quality work in all areas of operation
  11. Construction of a new faculty
  12. Connecting the faculty with other world-renowned institutions
- (see Appendix 17 for Strategic goals of VFLJ (period 2020 – 2025))

## Key Values

1. Ensuring animal health and, consequently, human health.
2. Provision of safe food and consumer protection through the provision of state-of-the-art laboratory services and counselling.
3. Respectful, ethical and highly professional knowledge transfer to the next generations.
4. Ensuring the ethical treatment of animals.
5. Ensuring an open and respectful work environment for all employees.
6. Respect and promote creativity, professionalism and independence of employees and students.
7. Ethical and responsible conduct of research.

## Target Areas

### Education

VFLJ provides education towards the doctor of veterinary medicine degree, according to the 'Day One Competence' standard. We encourage students to work under the supervision of their teachers and independently in the intramural and extramural professional setting, within the core and elective curriculum.

### Science and Research

VFLJ offers a range of basic, translational and applied research possibilities to enhance the understanding of basic biological processes, animal health and welfare, promote public health and environmental sustainability, and to improve its national/international reputation in research, teaching and service. Scientific areas include, and are not limited to: Basic and translational biomedical research, Comparative medicine, Animal health, reproduction and productivity, Infectious and zoonotic diseases, Animal pathology and epizootiology, Food safety and public health, Animals and the environment. Applied science and high-impact publications are strongly encouraged.

### International Relations

VFLJ maintains scientific, educational and professional cooperation/collaborations through numerous individual and institutional professional partnerships. These support student and teacher exchange, and the international research projects. Although the VFLJ is bound to, and prioritises the national educational scheme, several programmes enable the exchange of foreign veterinary students, professionals and researchers. In particular, international student exchange is strongly encouraged in the final years of the veterinary curriculum.

### Activity of diagnostic laboratories

The NVI is part of the public veterinary service, and is dedicated to protecting animal and public health. It provides diagnostic and animal monitoring services to stakeholders and the general public. Services include and are not limited to zoonoses, public health, antibiotic resistance, animal welfare, and environmental health and safety. These services are integrated with other EU reference laboratories, and are part of national and international animal and public health networks. NVI's expertise is also translated into the teaching and research activities of the VFLJ.

### Clinical activities

Clinical services are linked to the veterinary curriculum and serve most animal species representing the companion and production animal industry in Slovenia. Clinical science is committed to following the latest veterinary evidence, and the ever advanced diagnostic and curative technology. Student clinical rotations are an integral part of the veterinary curriculum. Clinical research is conducted on the premises, as well as in the population nationally and internationally.

### General description of the core curriculum characteristics

VFLJ follows the training requirements for veterinary students, which meet national professional requirements as well as the EU Directive on the recognition of professional qualifications (Article 38 of Directive

2005/36 / EC as amended by Directive 2013/55 / EU and EU Directive 2005/36 / EC) and the Standards for Quality Assurance in the European Higher Education Area (2015).

VFLJ's curriculum equally covers all regionally common fields of preclinical, clinical and other courses in veterinary medicine. No special tracks in the veterinary programme are available in the core curriculum. Extramural clinical rotations give students the opportunity to work more on their preferred animal species. Specific knowledge can also be achieved through the selection of elective courses in each year of the veterinary curriculum.

The new curriculum has been implemented in the academic year 2020/2021, which is to follow current professional directions in veterinary medicine. Some structural changes in companion animal medicine have been made, with emphasis on exotic animal medicine. More emphasis was also placed on environmental safety and antibiotic resistance. Elective course selection has increased, which will give students more choice in developing their preferred field of veterinary service. A final exam was also established, which will be adapted yearly together with our stakeholders to cover the practices' needs.

**1.2 The Establishment must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country.**

**The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.**

**The decision-making process of the Establishment must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT standards.**

### **Details of the Establishment**

**Name of the Faculty:** University of Ljubljana, Veterinary Faculty (VFLJ)

**Address:** Gerbičeva 60, SI-1000 Ljubljana, Slovenia

**Telephone:** +386 1 477 9100

**Fax:** +386 1 283 2243

**Website:** <https://www.vf.uni-lj.si>

**Email:** glavna.pisarna@vf.uni-lj.si

**Head of the Faculty:** Dean Prof. Andrej Kirbiš, PhD, DVM

**Vice-Dean for Research:** Prof. Gregor Majdič, PhD, DVM

**Vice-Dean for Education:** Assoc. Prof. Breda Jakovac Strajn, PhD, DVM

**Vice-Dean for Clinical and Operative Activities:** Prof. Bojan Zorko, PhD, DVM

**General Secretary:** Mojca Perušek, B.Sc. Sci. Law

**Address of the University:** Kongresni trg 12, SI-1000 Ljubljana

### **Official authority overseeing the Veterinary Faculty**

VFLJ is one of the 26 members (3 art academies and 23 faculties) and 4 associated members (National University Library, University of Ljubljana Central Technical Library, University of Ljubljana Innovation-Development Institute, National Institute of Biology) of the UL.

The relation between faculties and the UL is defined in the Statute of the University of Ljubljana. All of the main activities, such as strategy, financing systems, enrolment procedures, human resources management, adoption of new programmes, international student and staff mobility and the national research

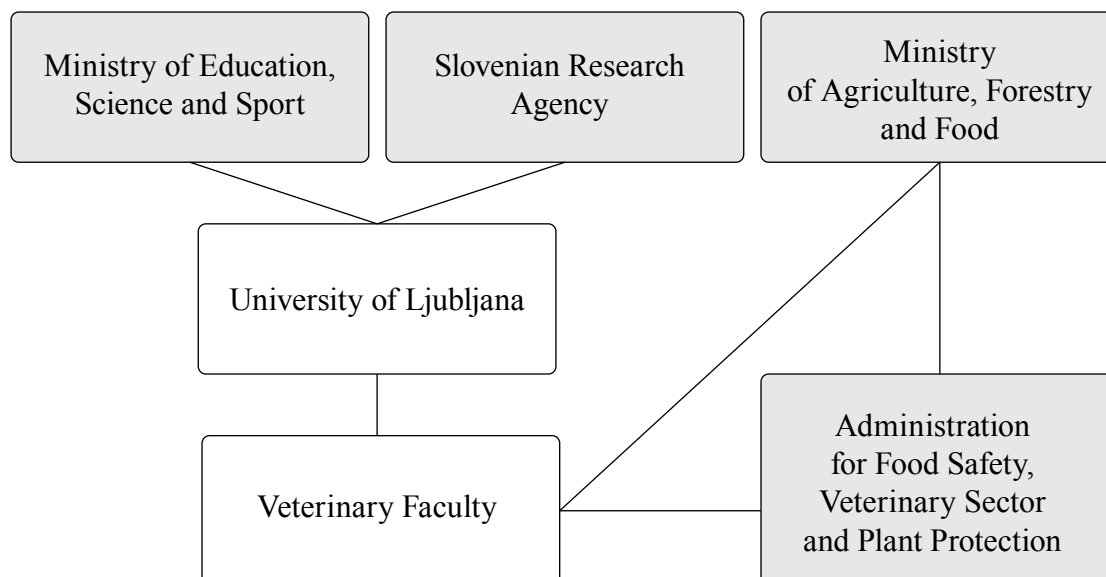
programme are planned and executed at the level of the UL. The Higher Education Act regulates the status issues of higher education institutions, the conditions for pursuing higher education, defines the public service in higher education and regulates the way it is financed. On the basis of this act the UL is allotted a lump sum for education by the Ministry of Education, Science and Sport (Ministrstvo za izobraževanje, znanost in šport - MIZŠ) and has to report to the Ministry annually. The funds are distributed to faculties regarding the discipline and the number of enrolled and graduated students in accordance with the UL rules in place.

Research that follows the current national Resolution on Research and Innovation Activities with an emphasis on the research work segment is financed by the Slovenian Research Agency (Javna agencija za raziskovalno dejavnost Republike Slovenije – ARRS). The agency finances research projects (basic, applied and oriented) and research programmes.

VFLJ is a legal entity whose capability is limited when it performs activities within the National Higher Education Programme and the National Development and Research Programme for which the Republic of Slovenia provides funds, or which are obtained from European and other international cooperations and projects financed from public funds. On the basis of the authorisation of the UL, it shall act in the course of carrying out these activities in legal transactions on behalf of and for the UL.

In addition, the VFLJ also performs activities on the basis of public authorisations and concessions, as well as educational, research, developmental, diagnostic, clinical and advisory activities and other related activities defined in the appendix to the Statute of the UL. In order to carry out its activities, except for the implementation of the National Higher Education Program and the National Development and Research Program, VFLJ has its own account and a special sub-account for NVI activity. NVI is a special internal organisational unit within the VFLJ. The activity of NVI comprises the regulated activity of the public veterinary service in accordance with the concession contract with the Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection (UVHVVR) and is financed by the Ministry of Agriculture, Forestry and Food (MKGP) as in the Veterinary Act and the Law on Veterinary Compliance Criteria. In addition, VFLJ and NVI also perform market activities for the needs of other customers.

### Organisational chart of Veterinary Faculty with a brief description of the decision-making process



**Figure 1.** Organisational chart of the VFLJ

The Rector, UL Senate and UL Management Board are decision makers for the activities within the National Higher Education Program and the National Development and Research Program, and activities within other international projects financed from public funds.

VFLJ has authorised key personnel represented by: VFLJ leadership (Dean with Vice-Deans, Head of NVI and Heads of Organisational Units and Heads of Regional Units), Quality Assurance Manager VFLJ, Heads of Units and Laboratories.

The Dean defines the policy and objectives of VFLJ operation and ensures that all employees understand the policies and objectives of their operations, and that the management system is constantly revised and updated.

The tasks of the Head of the Organisational Unit (OU) are: management and coordination of educational, research and operational work carried out within the unit, responsibility for the economy and financial operations of the OU, responsibility for quality assurance of the OU, ensuring communication within the OU regarding the effectiveness of the management system and the importance of reaching customers and other requirements.

The organisation of VFLJ, management, quality assurance, the tasks of individual commissions and leaders are described in the document Rules on Internal Organisation of Veterinary Faculty University of Ljubljana and the Quality Assurance Manual.

## **Organisation, composition and management of Veterinary Faculty**

### **A. Institutes and Clinics:**

1. Institute of Microbiology and Parasitology
2. Institute of Food Safety, Feed and Environment
3. Institute of Pathology, Wild Animals, Fish and Bees
4. Institute of Preclinical Sciences
5. Institute of Poultry, Birds, Small Mammals and Reptiles
6. Clinic for Reproduction and Large Animals
7. Small Animal Clinic

### **B. Units of Special Meaning**

- NVI

### **C. Other Units of Joint Interest**

- Secretariat
- Quality Assurance Department
- Sample Reception
- Library

The organisational scheme with the responsible personnel of the VFLJ institutes/clinics, departments and laboratories is provided in Appendix 1 (Organisational Scheme - VFLJ) and Appendix 2 (Organisational Scheme - NVI).

## **Brief description of councils, boards and commissions**

The UL bodies are: Rector, the UL Senate, the UL Board and the UL Student Council.

The Rector heads, represents and embodies the UL. The UL Senate is the chief expert body of the UL. Senate members (senators) may be elected from among the teachers who are full-time employees of UL members, and the students. The Management Board is an administrative body that primarily decides on economic matters and ensures the smooth material operation of the UL. The Student Council of the University of Ljubljana is a body of UL students. The Student Council consists of the presidents and the vice-presidents of UL members' Student Councils.

The VFLJ bodies are: Dean, the Senate with its working bodies, the Management Board, the NVI Council, the Academic Assembly and the Student Council.

VFLJ is led and represented by the Dean who is the head of VFLJ and performs tasks based on the University Transformation Act, the Statute of UL and the Rector's authorisation. For the implementation of the national programme of higher education and the national research programme, the Dean responds to the Rector. At the same time, the Dean is the managing body of VFLJ when it operates in an area where the legal capacity of members of the UL is not limited.

**The Dean** is responsible for the legality of the work of VFLJ and for the fulfilment of its obligations laid down by legislation, takes care of the management system, signs contracts concluded by VFLJ, acts on behalf of the employer in regulating the employment relationships of workers, adopts decisions to ensure the operation of VFLJ, decides on the employment relationships of workers (except for workers carrying out a national programme of higher education and the national programme of scientific research), appoints the heads of organisational units and laboratories and their deputies and laboratory heads, performs the functions of the management body for activities and tasks outside the national higher education programme and research work, imposes disciplinary measures whenever necessary, and performs other tasks in accordance with the law, other regulations and general acts of the UL.

**The Senate** is the highest professional body of the VFLJ which adopts the VFLJ rules, proposes to the UL Senate to accept study programmes, gives consent to the criteria for evaluating the work of higher education teachers, assistants and researchers for the habilitation, elects teachers and assistants in higher education, and scientific workers to the academic title (except for the full professor and senior scientist), proposes to the UL Senate the candidates for election to the title of full professor and senior scientist, adopts the annual work programme and the annual report of the VFLJ, appoints a commission to monitor the doctoral students and programmes of doctoral dissertations, approves the doctoral dissertation evaluation and public defense, accepts comparability and recognition of education, appoints committees and working bodies of the Senate VFLJ, as a second-instance body, decides on complaints from students in study cases, discusses and decides on the opinions of the student council VFLJ, carries out monitoring of the quality of education, research and operative work, deals with the policy, objectives and procedures of the management system, performs other tasks, if so determined by law, by the UL Statute or by another general act.

**Table 1:** Working bodies of the VFLJ Senate

Commission	Composition	Function/Responsibilities
The Habilitation Commission	Five members from among VFLJ employees appointed by the VFLJ Senate for four-year terms and eligible for reappointment.	Conducts procedures for the election of higher education teachers, researchers and higher education associates, proposes to the VFLJ Senate the appointment of rapporteurs on individual habilitation procedures, formulates proposals for changing the election criteria, gives initiatives to the VFLJ Senate to resolve issues in the field of election to titles, performs other tasks in the field of habilitations.
The Commission for Students' Affairs (CSA)	Five members from among the teachers and higher education associates of the VFLJ appointed by the VFLJ Senate for a four-year term. Two members and their deputies from among the students are appointed by the VFLJ Student Council for a term of one year. Reappointment of members of the commission is possible.	Is responsible for monitoring and promoting the quality of the educational process in cooperation with the person responsible for the quality of studies, prepares presentation materials for the veterinary studies, proposes to the Senate the limitation of the number of enrolled students, deals with all questions of students and teachers related to the studies, deals with appeals against decisions on extraordinary enrolment in the senior class and extension of student status, proposes decisions to the Senate at the second stage of decision-making, conducts procedures for the Prešeren Award and selects the student/graduate with the best success in the academic year, prepares the timetable, prepares instructions for enrolment in the 1 <sup>st</sup> year of veterinary studies, prepares proposals for scholarships for talented students, appoints a commission to assess the comparability and recognition of education, manages the process of recognition of examinations from other faculties, performs other tasks in its field approved by the Senate of the VFLJ.



The Postgraduate Study Commission	Five members from among the higher education teachers, doctoral associates and researchers of the VFLJ are appointed by the Senate of the VFLJ for a term of four years and two members from among the doctoral students for a term of two years. Reappointment of the members is possible.	Organization of all forms of postgraduate education in the field of veterinary medicine, advocates the fastest possible transfer of science into practice, proposes to the VFLJ Senate a call for postgraduate studies, proposes to the VFLJ Senate the commission to assess the suitability of the program of postgraduate work, reviews the assessment of this commission and submits it to the VFLJ Senate for further consideration, reviews the work of students, higher education teachers and associates in postgraduate studies and reports to the VFLJ Senate, performs other tasks authorized by the VFLJ Senate in its field.
The Commission for Scientific Research	Five members from among the research programs or project leaders are appointed by the Senate of the VFLJ for a term of four years; reappointment is possible.	Directs and coordinates scientific research activities in the VFLJ, prepares important documentation on scientific research activities of ministries, external institutions and research organizations (calls for proposals, reports, instructions ...), gives an opinion on development initiatives in the field of scientific research, discusses and gives an opinion on the eligibility of funds from ministries and other funders (equipment, funds for individual work of higher education teachers and associates, etc.), takes care of keeping records of scientific research work (research projects, young researchers, etc.), performs other tasks in its field, to which it is authorized by the Senate VFLJ.
The Commission for International Cooperation	Five members from among the VFLJ employees, appointed by the VFLJ Senate for a four-year term and eligible for reappointment.	Coordinates work in the area of international cooperation, monitors and implements international calls for proposals and national calls for proposals for international cooperation in the field of higher education, participates in the creation of bilateral agreements, records, monitors and coordinates activities under these agreements, keeps records of exchanges, seeks new partners for international cooperation, proposes the criteria for selection of candidates for exchanges to the VFLJ Senate for approval, plans and implements exchanges in agreement with the Study Committee and mentors/supervisors, performs other duties in its field authorized by the VFLJ Senate.
The Commission for Quality Assurance (CQA)	Responsible personnel in charge of the management system at each OU.	Participates in the design, maintenance and documentation of the management system, participates in the organization and performance of internal quality audits related to organization and laboratory testing, performs other tasks to ensure the management system defined in the VFLJ Quality Manual.
The College Of Veterinary Clinics	Veterinarians performing clinical work.	Takes care of regular information of clinicians on the occurrence of relevant infectious diseases, organizes a discussion in case of health problems relevant to the general public, organizes lectures in the form of presentations of interesting clinical cases.
The Curriculum Commission (CC)	Seven members from among the teachers of the VFLJ, appointed by the Senate of the VFLJ for a term of four years. Two members and their deputies from among the students are appointed by the VFLJ Student Council for a term of one year. Commission members are eligible for reappointment. The Commission is chaired by the Vice Dean for Education.	Discusses individual issues related to the preparation and implementation of the study, reviews the adequacy of the study and reports to the VFLJ Senate, assesses the compliance of the teaching materials with the detailed curriculum, proposes to the VFLJ Senate the necessary changes according to the self-evaluation of the study and the objectives.
The Commission for Biosecurity	Five members of experts in the fields of microbiology, chemistry and clinical sciences.	Preparation of a document to ensure biosafety and biosafety in the VFLJ, regular annual instruction of students and staff on biosafety and biosafety at the VFLJ, maintenance to ensure and maintain biosafety and biosafety at the VFLJ.

The Commission for Quality of Study (CQS)	Seven members from among the teachers of the VFLJ, appointed by the Senate of the VFLJ for a term of four years. Two members and their deputies from among the students are appointed by the VFLJ Student Council for a term of one year. Commission members are eligible for reappointment. The Commission is chaired by the person in charge of quality of Study.	Is responsible for preparing a report on the quality of studies at the VF, participates in the preparation of the annual self-evaluation report, monitors and promotes the quality of the pedagogical process, supervises the implementation and evaluation of student surveys and develops proposals to improve their implementation and use, prepares guidelines for the implementation of the pedagogical process in cooperation with the specialised services, reports to the VFLJ Senate on the quality of studies at the VFLJ in accordance with national and EAEVE guidelines, submits proposals and opinions on the implementation of the pedagogical process to the Curriculum Commission, the Student Affairs Commission, the Quality Assurance Commission and the VFLJ Senate.
The Commission for Welfare of Animals in Experimental Procedures	An animal welfare officer and his deputy, an appointed veterinarian to look after animal health in the procedures, and two members to participate in the procedures as project leaders. The members of The Commission are appointed by the VFLJ Senate. The animal welfare officer, his deputy and the appointed veterinarian must be certified by the UVHVVR.	Prepares tasks defined by regulations in the field of procedures on animals for research and training purposes (monitoring, training of operators, reporting, advising),  assesses the need to obtain a decision on the performance of animal procedures in accordance with animal protection legislation.

The managing authority for VFLJ is the **Management Board** of VFLJ which decides on matters of a material nature and takes care of the unhindered material operations in cases where they appear in legal transactions in their own name and for their own account.

The **NVI Council** is a professional body for NVI activity. It is composed of the head of NVI, who is also the chairman, with his deputies, heads of regional units NVI, heads of working groups of the council, heads or authorised representatives of institutes and clinics. The NVI Council has the following tasks: it deals with and accepts the NVI's annual work programme and the NVI's half-yearly and annual reports, examines the NVI development strategy proposals, addresses the issues of diagnostics and analytics, and, in this regard, monitors and develops new diagnostic and analytical procedures through the working groups.

The tasks of the **Academic Assembly** are: elects members of the Senate VF, debates the reports of the Dean, provides proposals and initiatives to the Senate VF.

The **Student Council** of the VFLJ discusses matters relating to the rights and duties of students, gives an opinion on pedagogical qualifications in the procedures of election to the title of teachers and colleagues, forms the opinions of student members for the Student Council of the UL, and elects the student members of the working bodies and member bodies. It can form opinions about candidates for deans.

### Formal collaborations with other establishments

Veterinarians employed at VFLJ are members of the Veterinary Chamber of Slovenia. They are included in the Section of veterinarians in education, research, diagnostics and industry. VFLJ, together with the Veterinary Chamber, chose teaching units and veterinary practices, where VFLJ students perform External Practical Training (EPT). Formal cooperation is also established with some farms where practical exercises are carried out.

The programme of lifelong learning for veterinarians and others is being prepared and evaluated in cooperation with the Veterinary Chamber.



Higher education teachers from other members of the UL carry out certain contents to obtain certain special competences (e.g. in animal husbandry, botany) and general competences (e.g. digital, communication, entrepreneurial skills). The personnel of VFLJ cooperate with other UL members in teaching and research activities.

Personnel of VFLJ cooperate with other veterinary schools in Europe and the USA, especially in the field of research work and the pedagogical and professional training of VFLJ personnel.

Cooperation with UVHVVR is well established, where every year a programme of work is prepared which is performed by NVI for the provision of animal health and safe food of animal origin and feed. In NVI laboratories, VFLJ students perform part of the EPT.

### **Persons responsible for the veterinary curriculum and for the professional, ethical, and academic affairs of the VTH**

Person responsible for the veterinary curriculum: Vice-Dean for Education: Assoc. Prof. Breda Jakovac Strajn, PhD, DVM

Person responsible for the professional, ethical, and academic affairs of the VTH: Assoc. Prof. Modest Vengušt, PhD, DVM

### **Comment to Substandard 1.2**

In February 2020 a group of experts was formed at the UL to agree on measures for the work and implementation of the pedagogical process during the emergence of COVID-19. Notifications of measures, up-to-date information on coronavirus and the operation of the UL are published on the UL website ([https://www.uni-lj.si/ul\\_in\\_koronavirus/](https://www.uni-lj.si/ul_in_koronavirus/)). A group was formed at VFLJ with the task of preparing and managing a plan of activities to ensure work processes during the period of COVID-19, which informed VFLJ staff and students about the measures taken.

At UL, the UL Center for the Use of ICT in the Pedagogical Process was established, which advises UL staff on the use of digital tools for teaching and work. This center has conducted several training sessions for VFLJ staff on the use of digital tools.

### **1.3 The Establishment must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.**

#### **Summary of the VFLJ strategic plan with SWOT analysis**

VFLJ structures its operations with the annual business plan, which frames the structure with regards to human resources, student affairs, postgraduate student affairs, revenue services and research. A periodic review of all faculties' operations is done on a yearly basis, which also includes comments from the student body. Further, an annual business report, including a quality assurance report, is prepared annually and discussed by the NVI Council, the VFLJ Management Board and, finally, the VFLJ Senate. The report is also presented at the Academic Assembly.

The annual report states that all faculties' activities are self-evaluated and a SWOT analysis is performed accordingly. The main sections of the annual report include:

1. Educational activity
2. Research activity
3. Working and study conditions
4. Management and development of the quality system
5. Business
6. Management and administration of the VFLJ
7. Human resources and personnel education
8. Information system

9. Property management
10. Clinical operations
11. Activities of the NVI
12. Goals achieved
13. Financial report

## SWOT analysis

Strengths	Weaknesses
<i>Member of the largest university in Slovenia with guaranteed state funding for basic operations. The only Establishment for veterinary education in Slovenia.</i>	<i>Advanced/specialty technical and educational support is mainly dependent on faculty's own resources.</i>
<i>Highly motivated student body, large pool of applicants each year.</i>	<i>The only criteria for enrollment at VFLJ is success in high school.</i>
<i>Strong connections with veterinary practitioners to ensure that students have hands-on-clinical-training opportunities in day-to-day veterinary business.</i>	<i>Occasional discrepancies in certain veterinary doctrines with veterinary practitioners.</i>
<i>Involvement in the activities of public veterinary services to control and protect animal health, and food and feed safety (such as the epidemic COVID 19, where various members were involved in training, counselling and development of specific guidelines)</i>	<i>Such work can become routine with lost enthusiasm for research and publishing. Limited active engagement of VFLJ staff in international organisations (e.g. EFSA)</i>
<i>Autonomy regarding the activities not financed by public funds.</i>	<i>Advances in services only supported after public reaction forces political initiatives.</i>
<i>Experience in participating in EU projects (7FP, ERANet, COST) and other international projects (NIH R01 and ICGEB projects).</i>	<i>Not enough international projects, most funding from limited national sources.</i>
<i>The majority of the faculty's employees' work spans across educational activities, research, administration and services.</i>	<i>It is hard to be excellent in all four key areas (educational activities, research, administration and operative services).</i>
<i>Good cooperation within regional and European initiatives (VetNEST and ERASMUS programme), other faculties and National Reference Laboratories.</i>	<i>The multitasking work of the majority of VFLJ employees leads to an inconsistent development of the establishment.</i>
<i>Quality systems are implemented in accordance with international standards SIST EN ISO / IEC 17025, and verified by the Slovenian accreditation body.</i>	<i>Overwhelming activities for standardisation sometimes has a negative effect on new initiatives, research and development.</i>
<i>Public funding is obtained from two ministries.</i>	<i>Constant struggle to dedicate public finances to key structural operations, including infrastructure development.</i>
<i>Lifelong learning organised by the Centre for permanent education makes it possible to adapt competences to the needs of students, internal as well as external stakeholders.</i>	<i>Acute adaptation to the students, stakeholders' or industry's new requirements.</i>
<i>A small institution that can adapt quickly to change and enable collaboration in broad areas.</i>	<i>Due to the complexity of the funding system, additional human resources and infrastructure are hard to finance.</i>
<i>High-performing clinics with scientific focus and significant number of patients for clinical teaching and research, including a high percentage of primary and referral cases in companion and exotic animals</i>	<i>Insufficient budget to renovate clinics and develop unique infrastructure.</i>
<i>Well organized decision making processes</i>	<i>Shortage of VFLJ staff for cooperation in all boards/commissions</i>
Opportunities	Threats
<i>Optimal use of research infrastructure to increase participation in national and international projects and thereby increase international visibility of VFLJ.</i>	<i>Insufficient access to EU funds due to uneven EU priorities.</i>
<i>Investing in infrastructure to develop internationally successful research programmes that will also attract internationally successful researchers.</i>	<i>Public services on a governmental level act as a closed system, which discourages employee fluctuation between different institutions.</i>

<i>Attracting students interested in farm animals, safe food and the environment</i>	<i>Not enough connection among staff and research at different units.</i>
<i>Two strong research groups with good research results.</i>	<i>Lack of strategic planning for research priorities, which makes research work diffuse and does not pursue common goals.</i>
<i>Expanding connections with recognised institutions abroad.</i>	<i>Brain drain – inability to retain the best young staff members who want to move towards better opportunities.</i>
<i>Finding sources to employ young colleagues.</i>	<i>The aging of current faculty employees.</i>
<i>More subjects in English language.</i>	<i>Compulsory use of Slovenian language in teaching makes students' mobility more difficult.</i>
<i>Strong involvement of VFLJ in public veterinary services enables the transfer of specific knowledge to students.</i>	<i>Support from UL is not Establishment oriented enough.</i>
<i>Due to the small number of students, a good tracking and evaluation system can be developed to assess their progress.</i>	<i>Dependence on external facilities (e.g. slaughterhouses and farms)</i>
<i>Support of the UL centres regarding new didactic methods and use of the digital learning</i>	<i>Increasing budget required to maintain buildings and infrastructure.</i>
<i>The possibility of working with a Career Center UL for an individual approach and the identification of students' needs</i>	

<b>Plan</b>	<b>Indicator</b>	<b>Timeframe</b>
<i>Continuous improvement and renewal of programme of study</i>	<i>Improved student satisfaction and achievements</i>	<i>Continuous activity</i>
<i>Continuation and expanding the competency monitoring model</i>	<i>Competence monitoring and improvement in competency monitoring model</i>	<i>Starting in 2021, then in three years intervals</i>
<i>Improved cooperation with external stakeholders</i>	<i>Feedback information from external stakeholders</i>	<i>Annually</i>
<i>Procurement of simulation aids and laboratory materials</i>	<i>New simulation models and laboratory materials</i>	<i>2020 - 2021</i>
<i>Training in use of ICT teaching tools</i>	<i>Improved competences in use of ICT teaching tools (measured by survey)</i>	<i>2020 - 2021</i>
<i>The establishment of a curriculum commission</i>	<i>Active curriculum commission</i>	<i>2020</i>
<i>Continued monitoring of the quality of the implementation of the study process with student surveys.</i>	<i>Discussions about the results of students' surveys at the teaching staff meetings.</i>	<i>Annually</i>
<i>Promotion of international mobility of students</i>	<i>International mobility of students</i>	<i>Annually</i>
<i>Increasing the number of research projects with an emphasis on interdisciplinarity</i>	<i>Interdisciplinary research projects.</i>	<i>Annually</i>
<i>Promotion of applying for international calls.</i>	<i>International projects.</i>	<i>2016 - 2021</i>
<i>Implementation of continuing education courses</i>	<i>Education courses</i>	<i>Annually</i>
<i>Improving communication between staff and work organization</i>	<i>Introduction of annual interviews</i>	<i>2020</i>
<i>Multimedia restoration of histological microscopy with digital interactive board</i>	<i>Digital interactive board</i>	<i>2019</i>
<i>Completion of the new building of the NVI unit Maribor.</i>	<i>New building in NVI Maribor</i>	<i>2020-2021</i>
<i>The reconstruction of the animal isolation facilities</i>	<i>Animal isolation facilities</i>	<i>2020</i>
<i>Electronic management of patient files.</i>	<i>Electronic management of patient files in use</i>	<i>2021-2021</i>
<i>Obtain funding to build a new VFLJ building.</i>	<i>Discussion with UL and other actors.</i>	<i>2018 – 2021</i>

**1.4 The Establishment must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and quality assurance, within their Establishment. To achieve this, the Establishment must develop and implement a strategy for the continuous enhancement of quality. The development and implementation of the Establishment's strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.**

### **Procedures for the assurance of the quality**

The quality system at UL is defined and established by the Rules on the quality assurance system at the UL (September, 2020). The rules are in line with European standards and quality guidelines. The Rules define quality mechanisms, the process of self-evaluation, accountability and provide measures for improvement. The Rules stipulate that all key areas (activities) of the UL and its members are included in self-evaluation, which is also evident from the structure of the quality reports. The Rules at UL are understood as the „quality rules“ as defined by the NAKVIS. They have the key elements of the quality rules as defined in the Accreditation and External Evaluation Criteria for Higher Education Institutions and Study Programmes.

Since 2000, all the members of UL have been preparing annual self-evaluation reports on the quality of teaching, study, research and professional services. A collated quality report is examined each year by the UL Senate and by other bodies. The preparation of self-evaluation reports involves various groups (teachers, students, administrative and technical staff). The staff and students are provided with information on the quality standards via the quality reports and via the discussion of these reports by the senates of the members and the UL, and at special workshops, training sessions and activities, which are held by the student organisation to foster quality. General monitoring and quality assurance mechanisms include: planning and reporting, external evaluations and self-evaluations, and accreditations. The cycle follows the established mechanism „PDCA - Plan, Do, Check, Act“. Specific mechanisms are aimed at ensuring the quality of staff, students, study, student assistance, research and other work. For the staff, these are open calls for vacancies, habilitation and training of teaching and professional staff for quality work. The loop of the QA plan is in Appendix 3.

The policy, strategy and activities of VFLJ for quality assurance are described in the Quality Manual of VFLJ and Rules, Guidelines, Standard Operating Procedures which are in agreement with standard ISO/EN 17025, ESG 2015 standards and European and national legislation. The performance of all VFLJ units is evaluated yearly at the Management Review which includes a risk assessment and identification of opportunities. The obtained data are analysed and evaluated by VFLJ decision makers. An important part of the evaluations are also students' surveys, which are analysed by the Vice-Dean and presented to teaching staff at the meetings with teachers of each course and at the yearly conference for teachers and assistants. Each year the VFLJ Plan is prepared for pedagogical, research and NVI activities. It includes a plan for training, employment, promotions, funding, maintenance and acquisition of new equipment and students' social activities. The plan preparation considers identified risks and opportunities. The plan is approved by VFLJ bodies and finally by the VFLJ Dean. By the end of February each year the reporting about the fulfilled plan is completed. The report about the VFLJ activities is presented to the Academic Assembly at the yearly meeting.

Ongoing VFLJ activities are presented to VFLJ personnel by e-mail news, and are also available on the VFLJ internet and intranet pages.

Students' competences are periodically evaluated in the survey, which includes students, teachers and assistants.

### **Comment on Substandard 1.4**

At the end of the summer semester from June 3, 2020 to July 1, a survey was conducted at the VFLJ where lecturers, assistants and students were asked questions about study process at the VFLJ during the epidemic COVID-19. The results of the survey are published on the intranet portal accessible to VFLJ staff.

**1.5 The Establishment must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population.**

The Establishment's website must mention the ESEVT Establishment's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.

**Description of how the VFLJ informs stakeholders and the public**

VFLJ is aware of its wider role as a teaching, public health, animal welfare, research and clinical institution. This is published on the VFLJ website, and further advertised through other media, especially when events of great public interest are to be discussed. Active collaborative and individual effort is supported to participate in international lay and professional events to advertise our objectives.

VFLJ also recognises the importance of being the role model within the local community. Events organised by the VFLJ, employees and its students aim to spread information about our work to the local community using mostly social events.

VFLJ's core teaching objectives are set out within the legislature. Employees' effort to participate in professional associations, also serving as administrators, is encouraged. VFLJ is encouraging its employees and is engaging as an institution in applying for international research funds to further its research portfolio. These activities are published in the form of reports, and attempts are made for extraordinary efforts to be published and advertised through relevant media.

VFLJ informs internal stakeholders via its web page (<https://www.vf.uni-lj.si/>) with information dedicated to undergraduate and postgraduate students, researchers, customers and the wider society. In the last few years a lot of effort has been put into the creation of a new website, which in 2019 won the Big Diggit Award as the Best Website of the Year, as well as the Gold Award in the Public Sector category. Before that it won the Netko Award for the Best Project of Public and Non-Governmental Organisations, the Netko Award for best scientific and educational content and several international awards. Its ESEVT status and the last Self Evaluation Report and Visitation Report are also available on VFLJ's web pages. Intranet with access limited to VFLJ personnel contains information that is relevant for internal stakeholders.

The VFLJ management organizes a meeting with external stakeholders at least once a year. Representatives of the main employers of VFLJ graduates (e.g. veterinarians, veterinary administration, pharmaceutical companies, veterinarians in the Slovenian Army, etc.) are consulted to obtain information about the performance of the graduates, about the need for additional knowledge and skills that should be included in the training program. The management decides on the results of the discussions in the Dean's College, where it proposes the activities to realize possible changes.

Each year, VFLJ prepares a brochure for students with data on the study curriculum, study programme and teachers, dates of exams and other relevant information.

At the national level, each year the informative days dedicated to potential students are organised, where study programmes and potential employment destinations are presented to secondary school pupils.

In addition, once a year, VFLJ participates in a special event called Informativa, where information is presented on the educational programmes available in Slovenia and abroad - from secondary schools to higher and postgraduate programmes and lifelong learning.

VFLJ personnel present the activities and research data at various meetings dedicated to researchers, teachers, students, professionals and lay persons.

At the graduation ceremony all students are invited to join The VFLJ Alumni Society. The personnel from the office for undergraduate study occasionally check the employment status of our students at the Employment Service of the Republic of Slovenia.

On special anniversaries, such as the 2016 sixtieth anniversary of the study of veterinary medicine, VFLJ organises events with the aim of reaching the public. In December 2016, we had exhibition panels with a presentation of the veterinary profession at the centre of Ljubljana. In 2018, we had a visit from children from kindergarten and elementary schools who were given our book, When I Grow Up, I Will Be a Veterinarian.

VFLJ publishes scientific journal Slovenian Veterinary Research. Students publish their own journal called Ructus which often includes the common work of veterinarians and students, as well as reports from various events.



Enrolment procedures for all faculty members of the UL are managed by the enrolment service of the UL. Due to the enrolment conditions, we know that students who have completed veterinary high school and high school (gymnasia) can enrol on our programme. At the beginning of the first year, the online survey is disseminated among the students with questions like why did they decide to study veterinary medicine, if they have animals at home, etc.

### **Comment on Substandard 1.5**

During the beginning of COVID-19 pandemic, VFLJ created a special webpage dedicated to all relevant information about COVID-19. This information included not only topics strictly related to the veterinary profession and COVID-19, but also more general information about the virus and the disease. The website had very high visibility. Several government agencies created a referral link to our website, and most national media outlets regularly used the information from our website for news. At that time, our website ranked among the 50 most visited in Slovenia.

We also created a dedicated email address (KoronaVet.VF@vf.uni-lj.si) that was open to the public for any questions related to the COVID-19 pandemic. The email address had a dedicated team that responded quickly to all media and general public inquiries about the pandemic.

We also set up a laboratory for PCR testing and offered free testing to all pet owners infected with the virus Sars-Cov-2. The public was informed about the tests through the general media.

**1.6 The Establishment must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The Establishment must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data.**

**Any action planned or taken as a result of this data analysis must be communicated to all those concerned**

### **Description of how and by whom the strategic plan, the organisation, the activities and the QA policy are decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

The VFLJ Plan and Report on the VFLJ activities are prepared on a yearly basis, following the guidelines of the responsible Vice-Deans and/or committee presidents. Activities are monitored by special commissions and reported on by the VFLJ Senate.

The Commission for Quality Assurance is responsible for introducing and implementing standard operational procedures for different activities. This commission includes quality managers from all VFLJ units in order to better disseminate the agreed procedures. In the year 2019, a special working group called the Commission for Quality of Study (CQS) was formed. First it consisted of the representatives of three broad areas in veterinary medicine (preclinical sciences, clinical sciences and sciences in food safety), a student and a representative from the office for undergraduate students. In 2020, the structure of the CQS has changed. It consists of seven members representing each institute / clinic from the ranks of teaching staff and two students, as well as the person responsible for the quality of studies, who is also the president of the CQS. This commission is responsible for the evaluation of the activities in higher education and reports to the Vice-Dean for Education.

Students evaluate each teacher, assistant and specific course with the online survey. Twice a year the report is automatically generated and is available to the teacher from the course. The Dean obtains the reports for all teachers in order to react to exceptionally bad and good survey results. The results are presented at the CSA, which consists of five representatives of teaching staff and two students. Each year, the Vice-Dean for education organises meetings with teaching staff of separate semesters, where different issues connected to education are discussed. The results of the students' survey, the conclusions from the meetings and solutions related to higher education are presented and discussed at the yearly conference for teaching staff.

At the UL level, the Commission for Quality Assurance prepares and compares the results of students' surveys between different members of the UL. The document Evaluation report of students' questionnaire of the UL is in Appendix 4.

In the period from 2015 to 2018 VFLJ was involved in the Erasmus+ project Internal Quality Management: Evaluating and Improving Competence Based Higher Education. During the project the flexible procedure for evaluating the level of perceived students' competencies at two critical stages of the study programme was developed and implemented. The developed screening evaluation will also be implemented in the future.

All activities of VFLJ are reported in the yearly report which is presented and at the Management Board, NVI Council and Senate which gives the final approval.

**1.7 The Establishment must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.**

**Date of the last ESEVT visitation, description of how the deficiencies have been corrected and how it has been used to enhance quality**

The last ESEVT re-visitation of VFLJ was in March 2011. Since then the following changes have been implemented:

1. In 2012, VFLJ advanced specialty training was started in Buiatrics, Poultry health and poultry production systems, Diseases and healthcare of birds, Small mammals and reptiles, Small animal veterinary medicine and Veterinary public health and food safety (<https://www.vf.uni-lj.si/en/izobrazevanje/strokovno-izpopolnjevanje>). These programmes were structured in partnership with the Veterinary Chamber of Slovenia. Board certified specialists from European and American Specialty Colleges form the backbone of these programmes. All national specialty-training programmes were accredited by the NAKVIS and students were credited according to the ECTS system.
2. In March 2015, the NAKVIS granted VFLJ with the national accreditation extension which is valid until 2022. Under the new rules, NAKVIS will perform the accreditation process at UL in 2021, not at each UL member like before. This is why the QA rules and documents are generally covered through UL. VFLJ has invested in new equipment and facilities upgrades. The most significant investments include a CT scanner, ultrasound systems, anaesthetic equipment, MALDI-TOF mass spectrometry, Next-Generation Sequencing, Sanger sequencing instrument, multimode microplate reader, thermocyclers for real-time PCR, and the rebuilding of stomatology, reproduction and post-mortem facilities. To improve the teaching and learning process, VFLJ purchased an interactive LED display with touch screen, a calf model and software for interactive models to study animal anatomy.
3. Documentation for the building dedicated to animals in isolation is in preparation.
4. As of the study year 2016/2017, a new course was introduced into the core curriculum of the 1<sup>st</sup> year DVM programme. The course title is "Welfare, ethics and legislation" (4 ECTS). This course replaced Biophysics, which is now offered as an elective course in a refreshed form with a new title "Biophysical Principles of Clinical Diagnostic Methods"; some biophysics topics are now covered in other preclinical courses. Several new elective courses were added to the curriculum and are offered to students who want advanced training in their preferred species: Advanced practicum in pig health care; Advanced health care of small ruminants; Experimental pathophysiology and toxinology; Scientific Methods; Equine sports medicine; Equine lameness wetlab; Honeybee society and its diseases; Aquaculture Health Management; Advanced small animal orthopaedic and neurology diagnostics; Advanced Parasitology practical course. In 2020, additional elective courses have been included, namely: Communication skills in veterinary medicine 1, Behavioral neurobiology, Use of experimental animals in research, Ruminant podiatry, Practicum in Cytopathology, Zoonoses, Biosafety, Special bovine surgery, Emergency medicine of dogs and cats, Microbial and antimicrobial environment in veterinary medicine, Communication skills in veterinary medicine 2, Business and Entrepreneurship in Veterinary Medicine. All elected courses except two award students with 3 ECTSs upon successful completion. Courses Zoonoses and Use of experimental animals in research award students with 4 ECTSs.
5. Regarding ESEVT indicators, at VFLJ the minimum standards for the number of necropsies for exotic animals and horses were not reached. From 2017, we increased the number of necropsies of exotic animals and horses to reach the standards of the ESEVT indicators.
6. The VFLJ's administrative scheme changed in April 2017, which significantly reduced the number of budgetary units (from 15 to 7) and the number of the faculty's voting senate members.

7. From 2015 to 2018, VFLJ participated in the Erasmus+ Programme entitled “Internal Quality Management: Evaluating and Improving Competence-Based Higher Education (IQM-HE)”. Five European universities decided to investigate the complex challenges of teaching in higher education. The objective was to develop and test the internal quality procedures for screening students’ perceived competence (the IQM Procedure). The programme was supported by expert partners from the fields of quality assurance, evaluation and implementation as well as experts on the Bologna Process (<https://www.iqm-he.eu>). The developed procedure will be implemented for VFLJ in the future.
8. VFLJ is currently (from 2018 to 2021 (prolonged due to COVID-19 situation) involved in the Erasmus+ project: Pan-European soft skills curriculum for undergraduate veterinary education – SOFTVETS, where five European veterinary schools prepare the curricula for communication, digital and entrepreneurial skills for veterinary students (<https://ec.europa.eu/programmes/erasmus-plus/projects/ep-lus-project-details/#project/2018-1-HR01-KA203-047494>).
9. Several curricular changes are implemented in the study year 2020/2021 pending senate approval. These changes will implement:
  - a. Earlier student exposure to animals and the clinical setting,
  - b. Optimisation of intramural clinical rotations,
  - c. Obligatory seminar/research work with public defence,
  - d. Obligatory final exam after all other ECTS were earned before graduation.
10. Prepared were documents for the new building for VFLJ.
11. The stair climber was obtained to improve accessibility for people with reduced mobility.
12. By the amendments to the Rules on the Internal Organization of the VFLJ three new commissions were formed as working bodies of the VFLJ Senate: The Curriculum Commission, The Commission for Biosecurity and The Commission for Welfare of Animals in Experimental Procedures. The later was previously formed as independent commission, now it is organised as a working body of VFLJ Senate.
13. Annual interviews have been introduced with external stakeholders to obtain information on their needs and on the involvement of VFLJ graduates in the work.
14. In the academic years 2019/2020 (summer semester) and 2020/2021 (winter semester), many adjustments were made in the working processes and in implementation of the study programme and learning activities due to the exceptional COVID-19 situation.
15. The faculty is encouraging the use of advanced e-learning platforms in teaching. Several courses now base their work on digital platforms from information distribution to examination/evaluation.

### Comments on Standard 1

VFLJ realises the importance of stakeholders’ (students, teachers, employers, veterinary administration) feedback.

Stakeholders’ feedback is collected at different levels.

Stakeholders’ suggestions are considered in small adaptations of courses.

All teaching staff members are encouraged to participate in the courses organised by UL to train the teachers.

From the Review of the Interim report: The reduction in public funding could affect the quality of education in the future.

### Suggestions for improvement on Standard 1

VFLJ is aware that the building facilities will not allow for the enlargement of the study programme and alternative ways of teaching. We are in the planning stage of a major rebuilding of the existing facilities, which should take place on and around current locations.



# Standard 2: Finances

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## Factual Information

**2.1 Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).**

### Description of the global financial process of the VFLJ

Sources of revenue are funded by national authorities: MIZŠ for the performance of the study programme for veterinary medicine, research agency ARRS for research activities in the frame of national research programmes and projects, Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection (Uprava Republike Slovenije za varno hrano, veterinarstvo in varstvo rastlin - UVHVVR) for the activities performed by the NVI for the state veterinary service and MKGP for the activities of animal selection services.

The financing of study activities at higher education institutions is governed by the Higher Education Act (Zakon o visokem šolstvu - Official Gazette RS, No. 32/12; No.109/12; No. 85/14; No. 75/16; No. 65/17 and No. 175/20) (Articles 72.b - 72.h) which determines that funds for first and second degrees are provided in the state budget as joint funds for a UL (integrated financing) based on a four-year financing contract. In the course of the four-year contractual period, funds are allocated differently (every other year also on the basis of six indicators - number of students and graduates, scientific publications, employability of graduates, research and development-marketing activity of the institution, habilitated teachers according to the artistic criteria). In study year 2019, the VFLJ received 10.899 EUR per enrolled undergraduate student (calculated on enrolled students from 1<sup>st</sup> to 6<sup>th</sup> year, students in additional year and re-enrolled students).

In accordance with the available budget, it also co-finances third-level studies at public higher education institutions. The financing of study activities is regulated by the Decree on Public Financing of Higher Education Institutions and Other Institutions (Official Gazette RS No. 35/17) and a yearly decision establishes the annual appropriations for the financing of the study activity ([http://www.mizs.gov.si/si/delovna\\_podrocja/direktorat\\_za\\_visoko\\_solstvo/sektor\\_za\\_visoko\\_solstvo/financiranje\\_studija/](http://www.mizs.gov.si/si/delovna_podrocja/direktorat_za_visoko_solstvo/sektor_za_visoko_solstvo/financiranje_studija/)).

The UL allocates the yearly funds in the form of a lump sum for the educational activities to its members according to the criteria accepted by the Administrative Board of the UL (Criteria of UL for the allocation of the yearly funds for the educational activities). A proportion of the funds is allocated for common activities of the UL and a proportion is distributed for educational activities. Investment funds at the UL are determined according to the long-term and the yearly investment plan of UL and the accepted budget as determined by the Administrative Board of the UL.

In addition to activities funded by national authorities, VFLJ also performs services for third parties which generate VFLJ market funds. Almost a quarter of the total income is obtained from VFLJ market funds.

The finances of the VFLJ, including the finances of the NVI, are shown within a general budget frame. Within the general financial report of the VFLJ, finances are broken down by organisational unit and source.

### Proportion of overheads to the official authority overseeing the establishment on revenues from services and research grants

The VFLJ as a member of the UL pays the UL 0.27% of the total yearly income from the previous year.

### Annual tuition fees for national and international students

Studying at the VFLJ is free for Slovenians, other EU citizens and citizens from non-EU countries with special agreement. Tuition fees are determined by the UL Administrative Board and are listed in the UL price list (<https://www.uni-lj.si/studij/cenik-storitev/>). Students at the VFLJ have to pay a small fee for en-

rolment: 29.00 EUR for the 1<sup>st</sup> year, 21.00 EUR for each of the following years, 6.70 EUR for a student card. Students also pay transport expenses for field education and excursions (according to the money spent). For the postgraduate PhD programme (4 years), the Biomedicine tuition fees are 13,200.00 EUR and for Environment Protection (4 year study programme) they are 12,000.00 EUR per programme.

### Annual expenditures and revenues in the last 3 years

**Table 2.1.1.** Annual expenditures in the last 3 academic years (in EUR) according to accrual accounting.

Area of expenditure	2019	2018	2017	Mean
<i>Personnel</i>	12,177,979	11,383,132	10,799,010	11,453,373
<i>Operating costs</i>	4,149,222	3,656,660	3,384,694	3,730,192
<i>Maintenance costs</i>	1,430,864	1,279,072	1,326,804	1,345,580
<i>Depreciation</i>	502,019	493,241	457,041	484,100
<i>Total expenditure*</i>	18,260,084	16,812,104	15,967,550	16,389,827

**Table 2.1.1.1** Annual expenditures for investments in the last 3 academic years (in EUR).

Area of expenditure	2019	2018	2017	Mean
<i>Investments</i>	920,008	1,004,929	1,346,800	1,090,579

**Table 2.1.2.** Annual revenues in the last 3 academic years (in EUR) according to accrual accounting.

Revenue source	2019	2018	2017	Mean
<i>Public authorities (MIZŠ)</i>	4,185,037	3,887,588	3,582,789	3,885,138
<i>Tuition fees (standard students)</i>	0	0	0	0
<i>Tuition fees (full fee students)</i>	0	11,500	0	3,833
<i>Tuition fees (postgraduate study – Biomedicine)</i>	46,850	40,258	43,979	43,696
<i>Clinical services</i>	1,599,081	1,383,081	1,216,960	1,399,707
<i>Diagnostic services (for the state and third parties)</i>	8,255,971	7,712,970	7,491,844	7,820,262
<i>Other services (veterinary hygiene service)</i>	400,609	480,976	480,976	454,187
<i>Research grants (national)</i>	1,832,414	1,677,461	1,473,567	1,661,147
<i>Continuing education</i>	77,760	59,971	73,081	70,271
<i>Donations</i>	4,588	2,400	400	2,463
<i>Other sources** (various services for third parties, research projects funded by other than national budget, rental fees, interest, students' administration fees)</i>	1,866,137	1,558,774	1,451,097	1,625,336
<i>Total revenues</i>	18,268,447	16,814,979	15,814,693	16,966,040

**Table 2.1.3.** Annual balance between expenditures and revenues (in EUR) according to accrual accounting.

Academic year	Total expenditures	Total revenues	Balance***
2017	15.967.550	15.814.693	-152.857
2018	16.812.104	16.814.979	2.875
2019	18.260.084	18.268.447	8.363

\*\*\* Total revenues minus total expenditures

All expenditures and water, electricity, gas, fuel, etc., are paid by the VFLJ and are included in the expenditure tables.

## **Comment to Substandard 2.1**

During the special situation in 2020 due to the epidemic COVID-19, VFLJ employees were sent to work from home, where possible. During this period VFLJ bought more laptops and computer equipment than in previous years, which enabled them to work and teach from home. Employees who were sent to work under hazardous conditions due to the possibility of infection with SARS-CoV-2 during the declared epidemic of COVID-19 were entitled to a special allowance for working under hazardous conditions. These funds were reimbursed from the state budget.

In most courses, instructors recorded some content and prepared study materials, so we also purchased additional equipment to record and edit the material. Our goal was to get students as close to field exercises and clinical practise as possible until the time when they could return to the faculty and do hands-on work. These funds were partially reimbursed from the state budget.

## **2.2 Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations.**

**The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.**

### **Description of the modus operandi for the financial management of the clinical and field services**

The workload for staff involved in education is announced for the study year and financial funds from the governmental budget are proportionally divided for each subject according to the workload. The head of each institute is in charge of the regular use of the allocated funds. In the case of a shortage of funds for education, the head of the institute can propose financing from the operative activities (VFLJ market funds) of the institute. If budgetary funds are not sufficient the Dean is responsible for ensuring additional funding from other sources of funding (e.g. services for third parties, additional research projects...).

### **Degree of autonomy of the establishment on the financial process**

Finances from the governmental budget for research, public veterinary service and animal selection are allocated and spent according to the written proposals and programmes. Financial funds from the governmental budget for education are in the form of a lump sum and the VFLJ has a large degree of autonomy in the allocation of these funds for educational activities. The highest degree of autonomy is for the allocation of income from the activities performed by the VFLJ for third parties – VFLJ market funds. Expected income from different activities and costs for different activities/materials/investments are planned in an annual plan, which is prepared by the end of each year. As a rule, income from operational activities is spend in the unit where the income was generated. The head of department prepares an order for the activity/materials/investment, and Management Board and/or a dean can approve the costs if funds are available.

## **2.3 Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.**

### **Ongoing and planned major investments for developing, improving facilities and equipment with the origin of the funding**

The main ongoing investments and planned in the coming years are: Continuation of activities for the construction of the new VFLJ building; participation in the creation of the national node ELIXIR with equipment for obtaining data from the field of genomics and for studying the structure and function of organisms at the cellular level; establishment of section-rooms for pathology in the NVI unit in Mari-bor; modernization and energy renovation of facilities at the farm in Center for Sustained Re-cultivation Vremščica.

### **Prospected expenditures and revenues for the next 3 academic years**

For the next three years, the VFLJ expects similar income and expenditure from the same funds as in the last three years, but due to possible economic consequences of the epidemic COVID-19, a certain decrease in income from various sources is to be expected.

### **Description of how expenditures, investments and revenues are decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

Spending of the VFLJ financial funds is planned according to the yearly VFLJ work plan. Persons in charge of the specific fields of VFLJ activities prepare the plan of activities. The preparation of the educational plan is the responsibility of the Vice-Dean for Education, while the Vice-Dean for Research is responsible for planning the research. The head of the Unit for accountancy is in charge of the financial plan. The yearly plan and report of the VFLJ is approved by the VFLJ Administrative Board and the VFLJ Senate.

The Dean of the VFLJ is responsible for performing the valid study programmes and for social security within the framework of the allocated funds. Each purchase order for material or services is (daily) approved by the Dean.

The accountancy department follows the expenditures and revenues and prepares quaternary reports on the finances for the VFLJ Management Board and VFLJ Dean. A yearly report on the VFLJ activities and finances is presented to VFLJ Management Board, NVI Council and VFLJ Senate.

The allocation of funds for so-called individual research work (IRD) (which may be spend on participation in scientific meetings, research reagents, literature etc.) for UL teaching staff and assistants is determined by UL Criteria for Allocation of Funds for Study Activity, Purchase of Equipment Related to Educational Activity, Investments and Investment Maintenance. For the year 2020, the criteria state that the UL member may exclude from the funds for study activities funds for the IRD up to EUR 1,400 for the position of higher education teacher who has at least a full direct weekly educational commitment and EUR 700 for the position of an assistant.

A UL member may also decide on higher amounts if it so determines in the member's budget to ensure operations, or reduce the amount proportionally according to the percentage of direct weekly educational commitment, or set it in accordance with financial capabilities and development priorities. Currently, the VFLJ provides IRD funds for teachers in the amount of 700 EUR and for assistants in the amount of 200 EUR. These funds provided by the UL are usually combined with funds from other sources: e.g. funds for research projects, funds generated by operational work and/or by work for the NVI.

### **Comments on Standard 2**

Equipment that is used for education (clinical work, research and diagnostics) in veterinary medicine develops rapidly. This equipment is also expensive and it is difficult to purchase equipment for educational purposes alone. The funding of the VFLJ from the governmental budget for education is not sufficient. Therefore, extra income that the VFLJ obtains from the activities of the state veterinary service, clinical work (small animal clinic and equine clinic), research grants and other operative activities is also used for the equipment and training of the personnel who are involved in education. Therefore, the involvement of personnel in other activities in addition to educational work is encouraged. Autonomy in financial matters for funding obtained from operative activities is complete, and VFLJ market funds could be used for investment in equipment and training that is necessary for teaching.

Organisation of the faculty, which according to the Law on the Veterinary Service enables the NVI to be a department of the VFLJ has great benefit not only for education, but also for financial income. About half of the total revenue comes through the NVI. The organisation and activities of the VFLJ – performing teaching, research and state veterinary services - is the optimal solution for the suitable use of equipment, knowledge and personnel for different levels of activities in the veterinary field.

### **Suggestions for improvement on Standard 2**

In the last three years, the documentation and blueprints for the new building were prepared and expenses for these activities were covered by funds from the VFLJ market. Currently, VFLJ leadership is making a lot of effort to obtain additional funding for the new building. Currently, the VFLJ is close to obtaining

the construction permit and the management of the UL and the VFLJ are negotiating to raise funds (loans, EU funds). The estimated value of the new construction equipment is EUR 58 million (including VAT).



# Standard 3: Curriculum

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## Factual Information

**3.1 The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in Annex 2. This concerns Basic Sciences, Clinical Sciences in companion animals (including equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Food Safety and Quality, and Professional Knowledge.**

## Educational aims and the general strategy for the design, resources and management of the curriculum

VFLJ offers one undergraduate study programme named Single cycle master study programme of veterinary medicine. After passing all the required exams, the graduate attendee of the faculty is granted the professional title: Doctor of Veterinary Medicine (DVM). With a degree from the VF, DVM can apply for the state exam, which is taken at UVHVVR. Detailed conditions on the manner and content of the state examination for DVM are prescribed by the competent minister (Rules on conducting the state examination for doctors of veterinary medicine, Official Gazette of the Republic of Slovenia 99/01).

Veterinary activities prescribed by the Veterinary Act (Official Gazette of the Republic of Slovenia 33/01) may only be performed by a licensed DVM.

Licences are issued by the Veterinary Chamber within its public authority. To obtain a licence, veterinarians must:

- have completed university studies in veterinary medicine in the Republic of Slovenia or a recognised foreign education
- have passed the state exam or a recognised professional exam
- be a member of the Veterinary Chamber

The Vice-Dean for Education is the administrator of the study programme and good collaboration with the CSA, CC and the CQS is necessary.

In the document Rules on Internal Organisation and work of the Veterinary Faculty University of Ljubljana (Article 6) it states that VFLJ carries out educational, scientific, research, professional, consulting and other related activities according to the principle of professional autonomy.

Since the last EAEVE visitation in 2009 and the re-visitation in 2011, VFLJ has strictly followed the recommendations and requirements of EAEVE. The comments and suggestions from the last visitation were presented several times and with the senate's decision, an 'ad hoc' curriculum oversight working group (DSPS) was established on April 25, 2012. The group consisted of 10 teachers (basic, pre-clinical and clinical sciences + representative of students + president of CSSA + person from the office for undergraduate students). At several meetings, which took place from May 2012 to February 2013, the DSPS coordinated the positions of individual fields and prepared a proposal for the renewal of a study programme, which should be implemented in 2014. The proposal of DSPS was presented on 4.3.2013, but was not accepted.

Later, on 21.11.2013 the senate VFLJ again confirmed a DSPS, which consisted of 10 teachers (basic, pre-clinical and clinical sciences + representative of students + president of CSA + person from the office for undergraduate students). The group proposed changes for the study year 2016/17, which were approved by the Senate VFLJ: abolition of the Biophysics course, introduction of the compulsory Animal Welfare course, and introduction of new electives. However, topics from Biophysics are covered in Biochemistry and the new elective course Biophysical Principles of Clinical Diagnostic Methods.

On 17.11.2016, the DSPS presented the strategy for the next few years with the goal to achieve EAEVE approval in 2021. The Senate confirmed DSPS with 10 members: 8 teachers and two students (+ person from the office for undergraduate study), which presented the proposal of changes in the study programme in July 2018.



The Senate confirmed the proposal, as did UL. The implementation of the new curriculum began in 2020/21 in the first year, in addition, 11 new electives will also be added (Appendix 6).

In October 2020, the tasks of the DSPS (the general strategy for the design, resources and management of the curriculum) were taken over by Curriculum Commission (CC), the current working body of the Senate (see Table 1 in Standard 1) The leader of CC is the Vice-Dean for Education.

The strategy and aims, which are positioned as the basis of the conversation with all those who take part in the study programme, are listed in the yearly annual business report with the quality assurance report. The Senate is the highest body of VFLJ, which at the end confirms the aims. General information is presented to all employees and student representatives at the end of the year at the academic assembly.

For the last 3 years, the general strategy and aims for education have been (from annual business reports with the quality assurance report):

- Better organisation of clinical work (for 2018)
- Confirmation of the new, updated study programme (for 2018)
- Preparation for the consultative visitation and establishing a special group (for 2019)
- Improving working conditions in clinics and equipment (for 2019)
- Preparation of a self-evaluation report for the EAEVE visitation (for 2020)
- Construction of an isolation unit, renovation of the part of clinics (for 2020)
- Updating subjects with first day competencies. Preparation of a catalog of knowledge (for 2020)

VFLJ also follow the strategy of UL, which is:

- Improving the quality of the study process
- Organisation of summer school
- Improvement of international cooperation
- More subjects and programmes in foreign languages

### **Legal constraints imposed on curriculum by national/regional legislations and the degree of autonomy that the Establishment has to change the curriculum**

The studies at UL are conducted within the framework of the national programme of higher education and the national law on higher education.

The programme should acquire the accreditation by the national accreditation body NAKVIS. Since the year 2020, the NAKVIS will carry out the accreditation of the UL, not every UL member individually.

If the curriculum changes, we must follow UL's instructions regarding the nature of the proposed curriculum changes. Faculties have the authority to approve changes to all components of the curriculum except the following:

- Study programme and degree,
- UL course code,
- Name of course/unit,
- Type of course/unit,
- Year and direction (if this exist),
- Number of ECTS for the course/unit.

All changes must be approved by the Senate VFLJ. The changes mentioned above must also be approved at UL level (UL Commission for undergraduate study). Applications to change the study programme must contain an explanation and statement that changes will not influence the financial standing of the faculty. It must also be visible that annual SERs are the basis for suggested changes.



### How curricular overlaps, redundancies, omissions, and lack of consistency, transversality and/or integration are identified and corrected

As mentioned in first subchapter, CC is the central body for proposing changes to the curriculum. The CC discusses and proposes different changes to the curricula, e.g. the allocation of hours between various subjects on the basis of the requirements of Directive 2005/36/EC (as amended by Directive 2013/55/EU), regarding the representation of the obligatory contents and with respect to our own experience as well as the suggestions from the last EAEVE accreditation. VFLJ also considers of great importance the student study survey, by which the student workload and achievement of competencies were estimated. Each year the results of the student survey are discussed among students, teachers and finally the Senate.

All proposals from teachers and students are addressed to CSA, which assigns the documentation to the CC. The working group is led by the Vice-Dean for Education, who is also present at CSA meetings, so the connection between the groups is very good. At the same time, the Vice-Dean for Education is also present at the meetings of CQS.

The ideas and proposals of the CC are discussed at different levels. First, discussions are held separately by teachers and assistants and together with the student survey results. Then, there is a common discussion at pedagogical conferences and the final conclusions are discussed at senate level. Students are discussed through their representatives at the CC, but in general, because of the small size of the faculty, students can always enter the Vice-Dean for Education's office as well as the offices of other teachers and tutors, etc. Members of the student council promptly report students' opinions of the senate, but also during conversations with teachers and the Vice-Dean. When changes mainly affect one year, the meeting is organised with the actual class, as well as one year higher in lower class.

In addition, every year there are meetings with tutor teachers, tutor students, the student council, the Vice-Dean for Education and a person from the office from undergraduate study at the end of the study year. The aim of the meeting is to solve all problems to date and to update representative students with actual information. The tutors and teachers also have meetings in the first week in the new study year with their previous class.

All the above mentioned is standard procedure every year. In addition, regarding curricula changes, the Vice-Dean for Education also presents a proposal at each institute/clinic and at the Veterinary Chamber of Slovenia.

The last big curricula changes were proposed in 2018. In the year 2020/21 a new program started in the first study year, the subjects in the other years continue according to the old program. However, in all years we have added new electives (Appendix 6). At VFLJ 1 ECTS is 30 hours.

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

Year	Semester	Hours of training							
		Theoretical training			Supervised practical training			Others (electives)	Total
		Lectures	Seminars	Supervised self learning	Laboratory and desk based work	Non-clinical animal work	Clinical animal work		
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	1	233	30	483	64	90	0	0	900
	2	180	6	359	75	100	0	180	900
2	3	220	5	495	165	0	0	0	885
	4	229	11	430	105	50	0	90	915
3	5	315	2	455	85	43	0	0	900
	6	204	6	385	54	104	57	90	900
4	7	200	26	397	0	104	53	90	870
	8	265	27	473	0	59	106	0	930
5	9	230	7	530	40	67	85	0	959
	10	155	2	345	45	120	84	90	841
6	11	90	15	165	0	0	360	270	900
	12	0	30	60	80	0	460	270	900
Total		2321	167	4577	713	737	1205	1080	10800

Beside Curriculum hours shown/defined in the table 3.1.1 students have to inscribe 180 hours of electives in the first year, 90 in the second, third, fourth and fifth and 540 in the last, sixth year.

**Table 3.1.2.** Curriculum hours taken by each student (in the national curriculum supervised self-learning (C) is not described, just self learning as an hours of preparation for classes and examinations).

Subjects	Lectures	Seminars	Supervised self learning	Laboratory and deskbased work	Non-clinical animal work	Clinical animal work	Others (specify)	Total
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
<b>1. Basic subjects</b>								
<sup>1</sup> Medical physics								
<sup>1</sup> Chemistry (inorganic and organic sections)								
Animal biology, zoology and cell biology	33		72	15				120
Feed plant biology and toxic plants	15		50	15	10			90
Biomedical statistics	20	10	60					90
1-Total number of hours	68	10	182	30	10	0	0	300
<i>Specific veterinary subjects</i>								
<b>2. Basic Sciences</b>								
Anatomy, histology and embryology	180		435	75	180			870
Physiology	210	12	305	90	13			630
Biochemistry	150	6	195	69				420
General and molecular genetics	45	5	60	10				120
Pharmacology, pharmacy and pharmacotherapy	69	6	130	60	5			270
Pathology	120		150	24	66			360
<sup>2</sup> Toxicology								0
Parasitology	60		150	30				240
Microbiology	120	0	225	75	0	0		420
<sup>3</sup> Immunology								0
Epidemiology	30		60					90
<sup>4</sup> Information literacy and data management								0
<sup>5</sup> Professional ethics and communication								0
Animal health economics and practice management	20	10	60					90
<sup>6</sup> Animal ethology								0
Animal welfare	15	15	90					120
Animal nutrition	60		140	30	10			240
2-Total number of hours	1079	54	2000	463	274	0	0	3870
<b>3. Clinical Sciences</b>								
Obstetrics, reproduction and reproductive disorders	115		205		55	45		420
Diagnostic pathology								0
<sup>7</sup> Medicine								

<sup>8</sup> Surgery	60		90		48	12		210
<sup>9</sup> Anesthesiology								0
Clinical practical training in common animal species (clinical rotation and clinical practice)				80		820		900
Clinical practical training in common animal species								0
Equines	70	4	160		10	56		300
Pigs	85	2	145		10	58		300
Poultry	75		170		55	0		300
Ruminants	85		145		40	60		330
Cats and dogs	70		210			80		360
Small animals	25	5	75			15		120
Fish and bees	30	4	110		22	14		180
Wild animals	30		65		25			120
<sup>10</sup> Preventive medicine								0
Diagnostic imaging+ostale klinike	15		75		15	15		120
<sup>11</sup> Therapy in common animal species								0
Propaedeutics of common animal species	60		90			30		180
3-Total number of hours	720	15	1540	80	280	1205	0	3840
<b>4. Animal Production</b>								
Animal Production, including breeding, husbandry and economics	114	43	190		73			420
<sup>12</sup> Herd health management								0
4-Total number of hours	114	43	190	0	73	0	0	420
<b>5. Food Safety and Quality, Veterinary Public Health and One Health Concept</b>								
Veterinary legislation including official controls and regulatory veterinary services, forensic veterinary medicine and certification	90	45	225					360
Control of food, feed and animal by-products	110		210	55	75			450
<sup>13</sup> Zoonoses								0
Food hygiene and food microbiology	110		180	85	15			390
Food technology	30		50		10			90
5-Total number of hours	340	45	665	140	100	0	0	1290
0								
Total	2321	167	4577	713	737	1205	0	9720
electives								1080
Grand total								10800

Total (without C)								5143
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<sup>1</sup> Part of Biochemistry. Animal Biology and Chemistry are supposed to be studied prior to the entry to veterinary education.

<sup>2</sup> Included in Pharmacology and Pathophysiology

<sup>3</sup> Included in Microbiology

<sup>4</sup> Included in different courses

<sup>5</sup> Partially included in welfare course and Administrative and forensic veterinary medicine and clinical courses

<sup>6</sup> Partially included in clinical courses <sup>7</sup> Partially included in clinical courses <sup>8</sup> included also in some clinical courses <sup>9</sup> included in Surgery course

<sup>10, 11</sup> Included in all courses dealing with diseases and health care of various animal species and <sup>11</sup> also in Pharmacology course

<sup>12</sup> Included in farm animals clinical courses; clinical rotations

<sup>13</sup> Included in microbiology, parasitology, food safety and clinical courses

**Table 3.1.3.** Practical rotations under academic staff supervision (excluding EPT)

Types	List of practical rotations (Disciplines/Species)	Duration (weeks)	Year of programme
Intra-mural clinics (VTH)	1. Companion animal rotations	10	6.
	2. Equine rotation	1	6.
	3. Production animal rotation	2	6.
Ambulatory clinics Herd Health Management	Included in the Equine and Production animal rotation	/	6.
FSQ & VPH	None	/	/
Electives	Additional week is available in Equine rotation	1	6.

**Table 3.1.4.** Curriculum hours taken as electives for each student

Subjects	Lectures	Seminars	Supervised self learning	Laboratory and deskbased work	Non-clinical animal work	Clinical animal work	Others (specify)	Total
	A	B	C	D	E	F	G	H
<b>1. Basic subjects</b>								
English language		45	45					90
Veterinary Medical Terminology	30		60					90
Sports- different courses at University level								90
History of Veterinary Medicine	30		60					90
Communication Skills in Veterinary Medicine	15	30	45					90
Communication skills in veterinary medicine 2	15	30	45					90
Business and entrepreneurship in veterinary medicine	15	15	60					90
Biophysical Principles of clinical Diagnostic Methods	15	15	45	15				90
1-Total number of hours	120	90	315	15	0	0	0	540
Specific veterinary subjects								
<b>2. Basic Sciences</b>								

<i>Veterinary Informatics</i>	30		45	15				90
<i>Anatomy of Laboratory and Exotic Animals</i>	30		45		10		5	90
<i>Microbiology Practical Course</i>			45	15		30		90
<i>The Methodology of Scientific Research</i>	15	15	60					90
<i>Experimental Pathophysiology And Toxinology</i>	10	5	55	20				90
<i>Behavioural neurobiology</i>	15	30	30	5		10		90
<i>Ecotoxicology in Veterinary Medicine</i>	15	15	45	10			5	90
<i>Parasitological Practical Course</i>	5		60	25				90
<i>Ethology in Animal Health Care</i>		30	60					90
<i>2-Total number of hours</i>	120	95	445	90	10	40	10	810

<b>3. Clinical Sciences</b>								
<i>Small Animal Orthopedic And Neurology Diagnostic</i>	5		55			30		90
<i>Surgery Practical Course</i>			45		33	12		90
<i>Pathomorphological Practice</i>	2	5	60	5	18			90
<i>Practice of Reproduction</i>			45			45		90
<i>Rearing Conditions and Health Care of Rabbits</i>	20	2	60			8		90
<i>Rearing Conditions and Health Care of Reptiles and Other Exotic Animals</i>	30	5	45			10		90
<i>Equine lameness evaluation wet-lab</i>	6		54			30		90
<i>Clinical Laboratory Practical Course</i>	10		60	20				90
<i>Anaesthesiology, Reanimation and Intensive Therapy</i>	15		45			30		90
<i>Veterinary Dentistry</i>	8		60			22		90
<i>Clinical Oncology in Veterinary Medicine</i>	16	6	45			23		90
<i>Dermatology of Dogs and Cats</i>	8		60			22		90
<i>Cardiology of Dogs and Cats</i>	10		60			20		90
<i>Dietetics of Dogs and Cats</i>	10	5	60	10			5	90
<i>Ruminant podiatry</i>	10	6	60			14		90
<i>Use of experimental/ laboratory animals in research</i>	30	3	80	7				120
<i>Cytopathological practice</i>	13		54	19		4		90
<i>Advanced surgery in cattle</i>	10	20	45			15		90
<i>Emergency medicine of dogs and cats</i>	15		50			25		90
<i>Equine Sports Medicine</i>	10		60			20		90
<i>3-Total number of hours</i>	228	52	1103	61	51	330	5	1830

<b>4. Animal Production</b>								
<i>Herd Health Management Course</i>			60			30		90
<i>Practicum On Health Care Of Pigs</i>	5		45			40		90
<i>Health Management In Aquaculture</i>	10	2	45		15	15	3	90
<i>Honeybee Society And Its Diseases</i>	10	2	40		15	20	3	90
<i>Breeding and Health Care of Game and Wild Animals in Enclosures</i>	20		55			10	5	80
<i>Health Care of Small ruminants</i>	8	10	60			12		90
<i>4-Total number of hours</i>	53	14	305	0	30	127	11	540
<b>5. Food Safety and Quality, Veterinary Public Health and One Health Concept</b>								
<i>Veterinary Proficiency</i>		30	60					90
<i>Cynology for Veterinarians</i>	15					15	60	90
<i>Biosafety</i>	10	10	45	1		24		90
<i>Zoonoses</i>	45	15	45	15				120
<i>Microbial and antimicrobial environment in veterinary medicine</i>	30	15	35	10				90
<i>5-Total number of hours</i>	100	70	245	26	0	24	15	480
<i>Total</i>	621	321	2413	192	91	521	41	4200
<i>Total (without C)</i>								1787

The total number of hours (36 credits) to be taken by each student out of the various subject groups is determined in the Study programme and in the Student information package.

#### **Table 3.1.5. Optional courses proposed to students**

There are no optional courses on VFLJ. However, students may participate in hands-on work in departments if interested, such as additional necropsies in the pathology, assisting in the reproductive department, assisting with surgical procedures in the clinics, laboratory work, and animal care.

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

Before entering clinical rotations, students are familiarised with basic clinical principles through their pre-clinical and clinical courses. In general, the imparting of clinical knowledge, skills and competencies is considered during the whole study programme.

Starting from the 1<sup>st</sup> to 4<sup>th</sup> semesters, basic course teachers associate basic knowledge with clinical cases to demonstrate connection and meaningfulness. In the exercises different cases from practice are discussed.

In the 5<sup>th</sup> and 6<sup>th</sup> semesters the course Basic Clinical Signs is started. Surgery and Pathology with theoretical teaching and practical training on VFLJ clinics and own animals is also provided in small groups.

In the 7<sup>th</sup> and 8<sup>th</sup> semesters lectures start on reproduction as well as on horse, pig and poultry clinics.

In the 9<sup>th</sup> and 10<sup>th</sup> semesters clinical knowledge is expanded with lectures and exercises at the remaining animal clinics (ruminants, small animals, exotics, fish, bees and game).

In every training unit students have clinical examination training (hands-on).

Further clinical training is provided during various electives or field trips.

Veterinary professional training, including for example, ethical or communicational training, is provided during lectures, seminars and electives.

### **Core clinical rotations and emergency services and the direct involvement of undergraduate students in it**

Clinical rotation is organized in production and companion animals.

Student rotation in production animals: Equidae (two weeks 24h/7), ruminants (one week 24h/7), pigs (one day).

Companion animals student rotation: poultry, birds, small mammals and reptiles (three days), small animal intensive care ward (four to five weeks 24h/7), small animal internal medicine (two weeks), small animal surgery (one week 24h/7), anesthesia (one week) and diagnostic imaging (one week). Rotations in the small animal intensive care ward are scheduled for 365 days, while other clinical rotations are planned within the regular study period from October 1 to May 30.

Clinical rotations include hands-on, skills-oriented work as well as daily theoretical assignments. No more than 2-4 students are included in the group per clinical rotation, depending on the rotation. Students record their work in a special document that is signed and graded by their clinical mentors.

Ambulatory services are provided by the Clinic for Horses and Ruminants (a detached unit: Savinjska veterinarska postaja (SVP)). Students are stationed in dedicated student quarters at the SVP. Dedicated spaces for students participating in clinical rotations at the Veterinary faculty are also available on site.

The clinical mentor evaluates the student work (theoretical knowledge, collaboration and motivation, manual skills, attitude (towards the animal, the owner and colleagues)) with the assessment mark "passed" or "failed". A "failed" grade in any section means the failure of the entire rotation. Violations of veterinary ethics principles are dealt with at VFLJ level.

### **Teaching in slaughterhouses**

Practical training takes place in two different slaughterhouses with which the VFLJ has signed a contract. Under the supervision of a teacher, students are allowed to visit all parts of the slaughterhouse facilities and are trained to perform the veterinary sanitary inspection of carcasses on the slaughtering line. They also visit four different food facilities for processing and distribution of food of animal origin, where visits are led by the company's employees, supervised by the faculty teacher. These visits are reported to and approved by the UVHVVR, which is competitive authority for official control of food.

The slaughterhouse for farm animals (cattle, pigs, horses) where the majority of practical training takes place is located 85 km from the VFLJ. The poultry slaughterhouse is 15 km away and is visited once by every student.

Training is performed in groups of 7 students, who work under the supervision of the teaching staff and official veterinarians. Each student has 75 hours of practical training. This encompasses nine visits of slaughterhouses lasting 8 hours (one visit to the poultry slaughterhouse) and visits to the food processing facilities. Transport to all locations for practical training in slaughter houses is organised by the VFLJ.

Students are familiarized with the whole process of veterinary sanitary control of animals for slaughter and meat (the so-called 'from stable to table' control) in a sequential fashion. First they are taught about the control of animals before slaughtering and ante mortem inspection, and then they learn to perform the post mortem inspection of carcasses themselves. Each stage of inspection is first demonstrated by an assistant and later performed by students on the slaughtering line independently. The assistant supervises the students' work and checks that the inspection is performed successfully. When a student fails to successfully perform an individual stage of inspection, the assistant completes or corrects the inspection. Students are also familiarized with the inspection of meat and organs in cases of emergency slaughter in or outside the slaughterhouse. Teaching also encompasses supervision of slaughterhouse workers and control of sanitary arrangements in slaughterhouses.

At the end of the practical course, the student must take a practical exam, which is an approach to the theoretical examination.



### **Selection procedures of the Electives by the students and the degree of freedom in their choice**

Each year the Senate VFLJ confirms the number of vacancies for each elective course. All electives are offered and they are delivered if more than six students are enrolled. If six students are not enrolled on the course, they must subsequently be reassigned to other subjects. Such an agreement is set out in our document Rules on the Work and Pedagogical Obligation of Higher Education Teachers and Staff of the Veterinary Faculty of the University of Ljubljana (Pravilnik o delovni in pedagoški obveznosti visokošolskih učiteljev in sodelavcev Veterinarske fakultete Univerze v Ljubljani). The upper limit for electives is 30 students, however, some teachers prescribe a different maximum number (less than 30 students: 16-20 for courses, e.g. dentistry, anaesthesia, oncology, dermatology and veterinary expertise). Electives and vacancies can be viewed online by students (<https://e-ucilnica.vf.uni-lj.si/mod/folder/view.php?id=1876>).

The principle of enrolment in the elective subject is: whoever enrolls earlier has more choice. In general, all students have the chance to select their favourite electives during their study years concerning their individual interests.

### **Procedures (e.g. logbooks) used to ascertain the achievement of each core practical/clinical activity by all students**

Logbooks are obligatory at clinical rotations and EPT. In other subjects, students are made aware of the subject's purpose, goals and competencies. Both students and teachers understand that the student has obtained the required knowledge by passing the exam.

**3.2 Each study programme provided by the Establishment must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.**

**The Establishment must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students.**

**The Establishment must also describe how it encourages and prepares students for self-learning and lifelong learning.**

VFLJ is small faculty regarding the number of students, teachers and places, which makes teachers and students accessible and connected. This is often noticed and positively commented on by our students, but also by students on visits (IVSA) or exchanges.

The CC mentioned in 3.1. has continuously informed all teaching staff about the importance of following the suggestions and recommendations of QA regarding higher education as well as EAEVE (ESEVT, FVE, etc.), where the specialities for veterinary medicine are discussed. The VFLJ has been an accredited institution for laboratory testing according to the ISO 17025 standard since 2002; therefore, teachers working at NVI also understand the idea of accreditation. The situation is different at clinics and preclinical units. In order to train staff, a good practice is to share and promote material from EAEVE and FVE/EVERI meetings among teaching staff. Members of DSPS, the predecessor commission of the CC, were from 2016 to 2018 at the same time members of the IQM - HE project (Internal Quality Management: Evaluating and Improving Competence-Based Higher Education (IQM-HE)). The project was co-funded by the Erasmus+ Programme of the European Union <https://www.iqm-he.eu/>. VFLJ was a project partner under the umbrella of UL.

The aim of our part of the project was to implement the developed procedure to evaluate students' competencies. The online questionnaire based on the Competence-Screening-Questionnaire for Higher Education (CSQ-HE) was prepared by the group. Students in the 7<sup>th</sup> and 11<sup>th</sup> semesters and teaching staff (teachers and assistants) were invited to participate in the online CSQ-HE survey. Workshops for students and teaching staff were organised just before the CSQ-HE was activated. The response rate was 41.07% for students (46/112) and 75.81% for teaching staff (47/62). The result of the survey was compared with the proposal for changes to the study programme of DSPS. It turned out that most of the proposals for changes to the study programme, which were stated in the project results, were already taken into account in the proposal for the renewal of the study programme.



Students are encouraged to study on their own and to take the opportunities available, such as online tests, self-assessment, journal clubs, personal feedback and competence check.

All teachers, responsible for particular courses, are obliged to submit a pedagogical report for the previous school year. Besides the usual questions about the course, like the presence of students on the course and the number of students taking the partial exams, they have to answer questions such as:

- What innovations did they introduce to the course,
- Proposal for future improvement,
- Pedagogical training attendance,
- How many students with disabilities was recorded,
- How many external experts (invited experts) were participating in course, etc.

In the last two study years (2018/19 and 2019/20), all teachers (100%) within the prescribed period submitted the record, which shows improved awareness of the quality process in the study programme. Reports are submitted to Vice-Dean for Education. He/she processes the data and presents it to the CSA and finally the VFLJ Senate. They were included in the annual business report with the quality assurance report of VFLJ. According to data from last year, approximately 50 % of the teaching staff members are taking extra courses on pedagogical improvement. The UL organises a number of different workshops for free, so anybody can take some of them for self-improvement in a particular field (didactic, IKT, rhetoric, etc.). As not all teachers are convinced of the benefits of such training, in 2019 the Dean sent an e-mail stating that participation in additional teacher training is recommended. Additionally, in 2020, the VFLJ Senate adopted criteria for the pedagogical training of teaching staff at VFLJ. For the first appointment to the position of a higher education teacher or assistant, training within the framework of the study program for training "Fundamentals of university didactics" is obligatory. In addition, teaching staff and assistants must attend at least one training course per year. All teaching staff have regular advancement of teaching staff according to UL rules and for last years, besides scientific excellence, pedagogical excellence was also evaluated.

Professors/assistants have good connections with other veterinary faculties abroad, offering the chance to get more practice in teaching.

All teaching staff are involved in research programmes and projects at the faculty, and some also in professional work at the NVI (Small animal clinic and Institute of preclinical sciences are not that involved at NVI). These experiences enable them to implement their scientific and professional findings and knowledge in the education process.

At the UL level, the Career Centre offers the students support in their career building and development, and provides more information on how to seek and find jobs. VFLJ has its own career counsellor who is accessible to students by mail or phone at all times, and is also at the faculty once a week. VFLJ and Career Center UL assist students in identifying their potential, career interests, strengths and opportunities in order to plan their careers in a responsible, timely and active manner. Students are supported to develop functional knowledge and skills that are important for better employability, such as presenting themselves at an interview, communication skills, job-search strategies etc. and many other transferable skills.

In addition, we organise various events with the Career Centre such as:

- Workshops for acquiring competencies and other employment skills,
- Visits and presentations of work environments in Slovenia and other EU countries,
- Networking and quick dating with employers,
- Consultations on challenges abroad, entrepreneurship, internships,
- Skype consultations with consultants from abroad,
- Fairs, career days and more.

Materials and recordings of various current workshops are available to students at Career Center website (<https://kc.uni-lj.si/about-career-centres.html> ).

The VFLJ collaborates with the Veterinary Chamber of Slovenia in providing students with extramural rotations.

Every year the VFLJ (Centre for Permanent Studies) in accordance with the Veterinary Chamber prepares the programme for permanent/life-long learning.

Finally, the VFLJ in conjunction with the Veterinary Chamber prepares programmes for postgraduate specialisation in the fields of small animal medicine, buiatrics, exotic pet animal medicine, veterinary public health and poultry health and production.

All veterinarians employed at the VFLJ are members of the Veterinary Chamber, united in the section for education, research and diagnostics (SIRD).

VFLJ encourages students to join journal clubs. In addition, VFLJ heavily involves students in conducting various events such as veterinary congresses and others. In recent years, students have participated in UL-funded projects in the business community. The purpose of the above projects is to promote the strengthening of cooperation and integration of the higher education system with the environment (business, non-business), the implementation of models of open and flexible transition between education and the business and social environment. Within the projects, students from different faculties jointly explored various creative and innovative solutions to the challenges of the business and social environment, while promoting the professional exchange of knowledge, experience and good practices of higher education teachers and experts from the (non)business community. VFLJ worked with students and mentors on eight such projects: brachiocephalic breeds, pain detection, a guide to home-prepared dog and cat food, exotic animal identification and welfare, dog and cat healthcare, horse breeding in the Karst, and stem cell use for animal health.

### 3.3.3 Programme learning outcomes must:

- **ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework**
- **include a description of Day One Competences**
- **form the basis for explicit statements of the objectives and learning outcomes of individual units of study**
- **be communicated to staff and students**
- **be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.**

### **Educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcomes**

The objectives of the veterinary curriculum are to:

- Provide students with the appropriate balance between knowledge and skills using evidence-based medicine necessary for students' day one competences. These are achieved through preclinical/bio-medical science courses and courses in animal health, ecosystems, public health and investigative medicine.
- Provide the professional environment to grow and maintain good relationships among students, the faculty and veterinarians, and personal and professional ethics.
- Provide students with a broad exposure to collaborative experiences with our educational partners, interactions with community veterinarians and research experience.

As a member of the UL, the VFLJ follows the instructions and rules defined in the Statute of the UL. In this document scores, general periods of examination, repetition, etc. are given. The VFLJ itself has adopted the 'Study rules', regulating teaching and student assessment procedures, examination periods, appeal procedures in case of disagreements, tracking of records and recognition of achievements obtained elsewhere.

The strategy of the VFLJ developing educational aims tends to provide the basis for the general approbation with an additional orientation period.

In the curriculum VFLJ teaching and examinations are divided into basic, preclinical and clinical sections, which are not strictly oriented by study year, e.g. in the same year clinical and basic courses can be taught.

1. Basic examination – scheduled mostly during the first and second years, covering anatomy, histology, biochemistry, botany.
2. Preclinical examination – scheduled mostly during the second and third years, covering physiology, pathology, microbiology, animal nutrition, animal breeding and genetics, parasitology, pharmacology and toxicology. Reproduction and food hygiene (meat, milk, other foods of animal origin) are in the fourth and fifth years.
3. Clinical examination covers animal hygiene and husbandry, clinical subjects (surgery, clinical radiology, diseases of poultry, horses, pigs, etc.), state veterinary medicine, and veterinary legislation.

These subjects have to be taught as regulated by the VFLJ. Learning outcomes are defined for every subject and have to be accessible for students in the e-classroom. In order to achieve the educational aims, the strategy of the VFLJ includes a constant review and improvement of learning and teaching outcomes on the basis of students' evaluations and assessment results.

### **How the Establishment ensures that the learning outcomes fit with the ESEVT Day One Competences**

From the very beginning, the VFLJ prepares the graduates for practical work after graduating. Species oriented clinics were always the way of clinical organisation. Every year more emphasis has been placed on the clinical work, other practical work and communication skills. The practical part of the clinical subjects has always been performed in small groups and clinical rotation in the 6<sup>th</sup> year is performed by 2 students. The first clinical practice performed in the 4<sup>th</sup> year is oriented towards the large animals' clinic, while practice in the 5<sup>th</sup> year deals with dogs, cats and exotic animals. Practice in food hygiene has always been provided in the slaughterhouses, as well as in the labs. Laboratory skills and behaviour, as well as the safety work in the labs, are taught from the first year onwards.

The last exam 'Administrative and forensic veterinary medicine' is an overview of the whole knowledge obtained during the studies. During their study, students are warned to pay attention to the 'day one competences'.

When preparing the new curriculum, the 'day-one competences' were one of the starting points for the determination of the professional competencies to be obtained by each course. The DSPS educates and helps all teachers with proper documentation so they can update the course syllabus by identifying the knowledge and skills students are going to obtain from their course. Also, in the frame of the IQM project, it was checked again that all the required day one competences are gained through the new study programme.

In the future, particular attention should be paid to the proper implementation of the accredited curriculum which has to be permanently upgraded by regular assessment procedures; the assessment of acquired competencies and the assessment of the implementation of the programme by teaching staff. In addition, the knowledge catalogue with marked assessed competences for each subject was prepared and discussed among students and teachers.

### **How and by who the learning outcomes are decided, communicated to staff, students and stakeholders, assessed and revised**

The course syllabus, prepared by the responsible teacher is sent to CSA, which forwards the documentation to CC, which sends the documentation back with comments.

CSA prepares the documentation for Senate VFLJ, which confirms the course syllabus.

The changes in learning outcomes are usually prepared with curricula changes; they do not change "ad hoc". Recently, VFLJ has been following the strategy in UL that all changes are first mentioned in the annual SER and then go to the approval process.

The students participate in all important parts of the creation of study changes and study programmes. Undergraduate students are members of the CSA, CQS, CC and the Senate. They have two organisations: the Students' Council and Students' Organisation, which are called to give suggestions and opinions. Students can have meetings with teachers to discuss certain problems with their studies (timetable, exam terms, etc.).

**3.4 The Establishment must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must:**

- **determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum**
- **oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes**
- **perform on going and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to**
- **continuous improvement. Any action taken or planned as a result of such a review must be communicated to all those concerned**
- **identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.**

#### **How and by who the core curriculum is decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

According to the Higher Education Act, a re-accreditation (external evaluations) of the UL is expected every seven years. At the UL level the faculties are strongly recommended to also apply for professional international external evaluations, such as the EAEVE evaluation.

The VFLJ is annually evaluated by the Slovenian Accreditation according to ISO 17025. In this accreditation, the accreditations of the faculty management and organization as well as the working conditions for research activities are included. At the present we are using 155 accredited methods in our testing laboratories, mainly at the NVI.

1. Due to the abovementioned, most of the teachers are aware that coordination of teaching and internal evaluation should be done more frequently, preferably as a yearly analysis, so evaluation of the curricula and teaching process is done every year.
2. End of study year – October – teachers prepare pedagogical report.
3. November – results of the study survey are available for subjects and teachers in the ICT system from the UL service.
4. November, December: Vice-Dean for Education has meetings with teachers from each year – 6 separate meetings, where comments and suggestions from the student survey are discussed at the class level. Students are not present.
5. December: Pedagogical conference with teachers and assistants is organised, where comments and results from the student survey are discussed separately by teachers and assistants. Students are not present.
6. At the same time, the Vice-Dean for Education starts to prepare SER, which is later sent to CSA (two student representatives) and CQS (one student representative) for additional discussion. The analysis of the student survey results are involved in the SER.
  - CSA have to approve the SER and pedagogical report, which consists of:
  - Results of the student survey.
  - Results from the pedagogical reports from teachers.
  - Results of raw data of study year: student progress, average marks, etc.
  - Results from discussion with teachers and assistants.
7. Finally, all these data are presented at the Senate and have to be approved in the frame of Annual Business Report with the Quality Report.
8. All comments regarding curricula CC (two student representatives) are collected and if there is a recognised need to make changes, a proposal is prepared. The first proposal is presented to the Dean, then to students, staff and stakeholders.

The activities during the last curriculum change are described in 3.1.

**3.5 External Practical Training (EPT) is compulsory training activities organised outside the Establishment, the student being under the direct supervision of a non-academic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH).**

**Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.**

### **Organisation of the EPT and how it complements the academic clinical training**

Students must complete at least 60 contact days of practical work within the Professional Practice course: 50 contact days in a clinical environment and 10 contact days in a public veterinary service inspection/ analytical activity. VFLJ has 120 contracts with veterinary clinics throughout Slovenia.

Clinical part of the Professional Practice (minimum 50 contact days):

1. Minimum of 12 contact days of practice on major or production animals. Part of this practice can be done at the Vremščica Center for Sustainable Cultivation during lambing; all days spent at the Vremščica Center for Sustainable Cultivation are also counted as 24-hour on-call,
2. A minimum of 38 contact days of practice on an animal of their choice,
3. Students must participate in at least six (6) 24-hour on-call duties; of which he or she must complete at least four (4) 24-hour on-duty hours in practice with production animals. The on-call duty shall be carried out within the contact days referred to in points 1 and 2.

Inspection activity - public veterinary service (at least 10 contact days):

1. In units of the NVI or
2. At UVHVVR - Inspection for Food, Veterinary and Security Plants
3. In the cheese factory of the Center for Sustainable Cultivation Vremščica
4. At foreign institutions within the European Union that perform a public veterinary service similar to NVI and/or UVHVVR.
5. Students may complete a maximum of 5 contact days of inspection/analytical work of the Professional Practice within the Equine Selection unit.

**Table 3.5.1.** Curriculum days of External Practical Training (EPT) for each student

<b>Fields of Practice</b>	<b>Minimum duration (contact days)</b>	<b>Year of programme</b>
<i>Production animals (pre-clinical)</i>	0	0
<i>Companion animals (pre-clinical)</i>	0	0
<i>Production animals (clinical)</i>	12	6
<i>Companion animals (clinical)</i>	36	6
<i>FSQ &amp; VPH</i>	10	6
<i>Others (specify)</i>	0	0



**3.6 The EPT providers must have an agreement with the Establishment and the student (in order to state their respective rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student during their EPT and be allowed to provide feedback to the Establishment on the EPT programme.**

**There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.**

### **How the EPT providers are linked to the Establishment, assess the students and provide feedback to the Establishment**

The EPT is organised by the students themselves. The collaboration between the establishment and EPT providers was outlined within the collaboration agreement between the Veterinary Chamber and VFLJ in 2013. Collaboration agreements are signed individually between the EPT provider (member of the Veterinary Chamber) and the establishment. The agreement establishes the relationship between the EPT provider and the student, the EPT provider and the establishment and the EPT provider and the Clinical studies coordinator. As per the agreement, the EPT provider signs off the student's log documents if the student's performance with regards to academic and clinical knowledge, ethics and team work was satisfactory. The log document is not signed off by the EPT provider if the student's performance based on the above-mentioned qualities is unsatisfactory, or when there is evidence of misconduct with regards to veterinary ethics and/or the EPT provider's internal rules. Direct feedback from EPT providers is given at the annual Veterinary Chamber symposium, where all aspects of EPT are discussed.

### **Name of the academic person responsible for the supervision of the EPT activities**

Clinical studies coordinator: Assoc. Prof. Modest Vengušt, DVM, PhD

**3.7 Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the Establishment and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The Establishment must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.**

### **Implications of students in the preparation, recording and assessment of their EPT**

Students must be enlisted/registered in the 6<sup>th</sup> year of the veterinary programme to be able to start the EPT programme. Students in the 6<sup>th</sup> year of the veterinary curriculum are considered to be ready to work independently under the supervision of a veterinarian holding a valid national licence issued by a national veterinary governing/administrative body.

Students receive a detailed orientation and instructions in a lecture setting at the end of the 5<sup>th</sup> year. All instructions, together with the log documents are available online. Students must keep and submit a record/log of cases/activities. All documents must be verified by their mentors and their institutions. The final assessment is graded by the students' EPT mentor with "pass" or "fail". Students' log records are reassessed by the Clinical studies coordinator before ETSC are awarded.

### **Complaint process in place concerning EPT**

In the contract for the EPT it states that due to unprofessional or/and unethical behaviour of students during the professional practice, the contractor may suspend the professional practice of such student, but before this they must also warn the student and inform the responsible person of VFLJ for EPT.

Students can always appeal under the terms of the Study Order to the CSA.

### **Comments on Standard 3**

- In 2020, ad hoc DSPS was replaced by CC, which became a working body of the VFLJ Senate with clearly defined tasks. The last year of the study should only be a clinical rotation and EPT. Also, in the

new proposed curricula we could not find a solution, so 6 elective subjects remained part of the obligatory curricula. During the discussion with students and teachers the problem of visiting all electives besides clinical rotation is very difficult.

- Better connection with EPT providers is needed and better feedback.
- Good teaching practices such as flipped learning, good vertical linking of some courses and real time knowledge testing and e-learning have been introduced at VFLJ on a larger scale.
- To evaluate the study programme, a competence check questionnaire for students is strongly recommended in semesters 5 and 9.
- The collaboration in the project ERASMUS+, IQM-HE (Internal Quality Management: Evaluating and Improving Competence-Based Higher Education), dealt with the development, implementation and dissemination of a European toolkit for QA in competence-based higher education.

Implementation of recommendations of the last EAEVE visitation concerning the curriculum (see Subchapter 1.7 in Standard 1):

- In new curriculum, research obligations are added for each student through the course Student Research Assignment (as described in Appendix 15). The big change is also the final exam (as described in Appendix 14).
- Adjustments due to exceptional COVID-19 circumstances are in general described in Appendix 13. Additionally, clinical rotations were halted during the first wave of the pandemic and continued after the government-imposed COVID-19 measures ended. Clinical rotations then continued into the summer until all students had completed all requirements, with the exception of a one-week rotation in the small animal intensive care unit. This rotation was still at least three weeks long for each student. During the second wave of the pandemic, clinical rotations remained active, with the exception of the Institute of Poultry, Birds, Small Mammals and Reptiles and Small Animal Surgery. These rotations cannot provide a safe environment due to specific infrastructural limitations. In some cases, rotations had to be canceled due to students, clients and/or staff COVID-19 related problem. In such cases, students were reinstated to the rotation after all regulatory measures were taken to combat COVID-19 issues. Rotations not offered during the pandemic will be scheduled during the summer period following the end of the regular study period.
- Regarding veterinary sanitary control, because of COVID-19 one half of the students were unable to visit all the slaughterhouses. The students prepared some reports from the slaughterhouse at home using e-learning. However, we managed to replace some of the practice.

### **Suggestions for improvement on Standard 3**

- Higher financial support would be welcome for staff development opportunities.
- Elective subject from Food Safety is in the approval process.
- Active participation in the University platform POPR (Personal and Professional Development Portal; (<https://www.uni-lj.si/study/study-popr/> ) which includes also a collaboration with external mentors and coordinator of clinical rotations at VF.
- Opportunity for students to participate in courses designed for lifelong learning and to receive recognition for this in an elective subject.
- Due to the high number of lecture hours, more alternative learning methods should be used in the study process.
- Instruments for assessing personal learning progress such as online tests and veterinary medicine progress test will also be necessary with regard to preparation for the final examination.



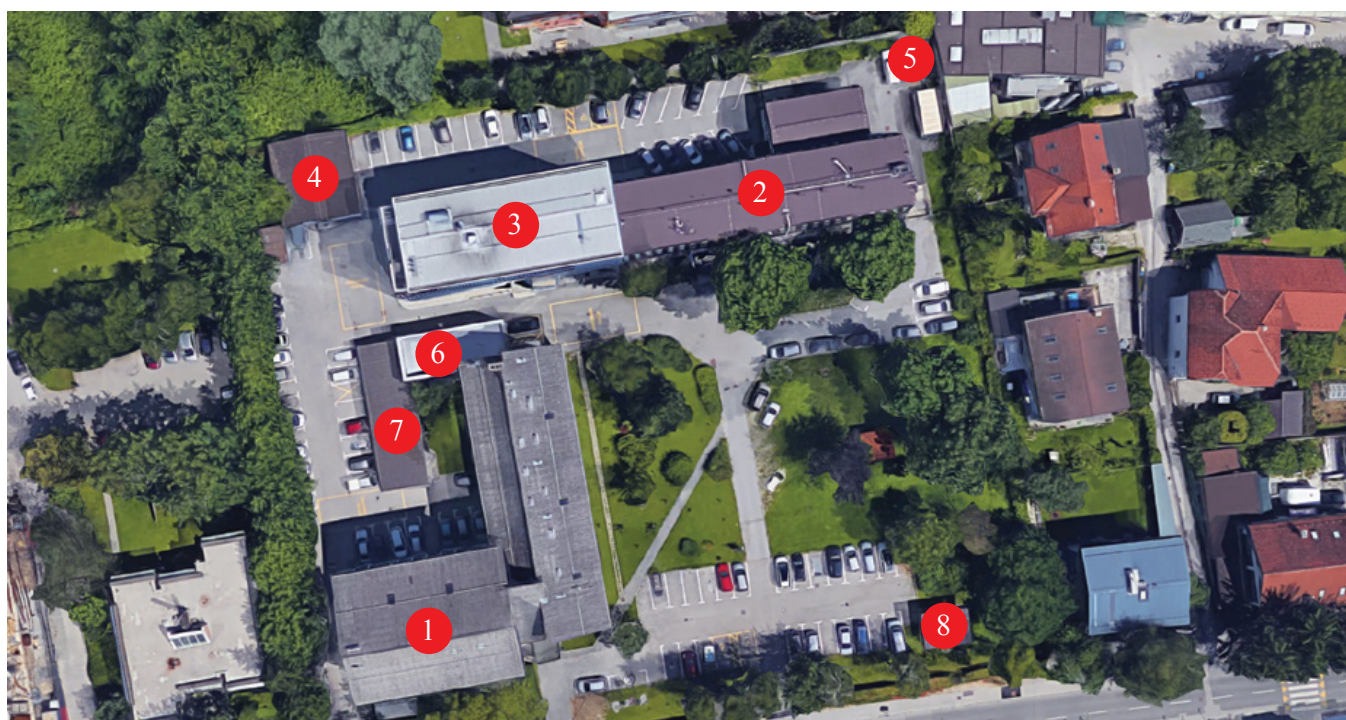


# Standard 4: Facilities and Equipment

**4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people with reduced mobility, and EU animal welfare and care standards.**

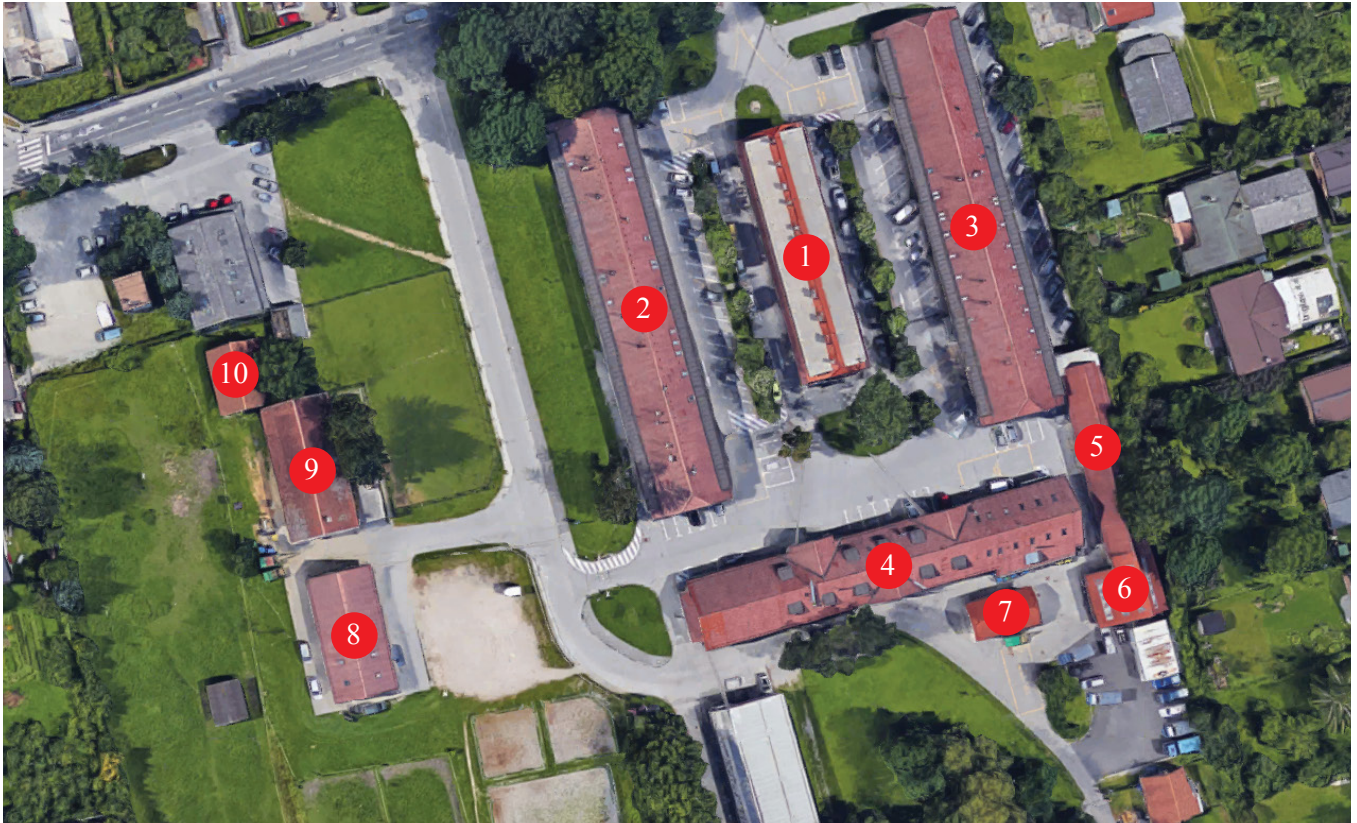
## Description of the location and organisation of the facilities used for the veterinary curriculum

VFLJ is primarily located on two sites in Ljubljana approximately 0.5 km apart, the intramural private Clinic in Žalec (SVP) 56 km from Ljubljana and the Center for Sustained Re-cultivation Vremščica 60 km from Ljubljana. In addition, NVI has 7 units.



**Figure 1:** Description of buildings and location of departments at Gerbičeva 60

1. Department for Anatomy, Histology with Embryology and Cytology, Department of Biochemistry, Molecular Biology and Genetics, Department for Physiology and Pathological Physiology, Department of Pharmacology and Toxicology, Department of Breeding and Healthcare of Wild Animals, Bees and Aquaculture, Human resources management unit, common spaces and the Dean's office.
2. Department of Pathology, Forensic and Administrative Veterinary Medicine, Food Safety Department, Department of Virology, Department of Bacteriology and Mycology, Quality Assurance Department, Sample Reception, NVI.
3. Department of Pathology, Forensic and Administrative Veterinary Medicine (new extension), Food Safety (new extension in 2004), Department of Virology and Bacteriology (new extension in 2004).
4. TSE laboratory.
5. Purifying plant.
6. Boiler room.
7. Warehouse office, Janitor.
8. Transformer station – state property.



**Figure 2:** Description of buildings and location of Institutes, Departments and Clinics at Cesta v Mestni log 47

1. Central building: Department of Environment, Animal Nutrition, Welfare and Hygiene, Informational Centre and Library, Institute of Poultry, Birds, Small Mammals and Reptiles.
2. West building: Clinic for Ruminants and Pigs, Exotic pet clinical services, Department of Parasitology. Premises for accommodation for on-call students. Hospital for cattle, small ruminants and pigs. Isolation facilities for pigs.
3. East building: Clinic for Reproduction, Small Animal Clinic.
4. Cross building: Department of Environmental, Animal Nutrition, Welfare and Hygiene, Clinic for Breeding and Health Care of Horses, Centre for Genomics, Clinic for Reproduction and Horses – laboratories and hospital stabling, Student room.
5. Small Animal Clinic – hospital stabling.
6. Isolation facilities (Small and Large Animals).
7. Institute of Poultry, Birds, Small Mammals and Reptiles – dissection room.
8. Clinic for Health Care of Horses – outpatient's department. Isolation of farm animals.
9. Clinic for Ruminants and Pigs – outpatient's and observation department, hospital for small ruminants.
10. Hospital (Sheep).





**Figure 3:** Description of building at Cesta v Mestni log 51 a

#### 1. Financial management and book keeping unit.

The physical capacities of the VFLJ comprise a network of approximately 45,323 square metres, of which 10,295 are usable areas of rooms, 5,754 square metres of parking area and the remaining 29,273 square metres are green plots, pastureland and meadows. All the faculty buildings are located on the southern fringes of the city of Ljubljana, at two adjacent sites. The complex of the buildings of the departments of basic sciences and administration are located on Gerbičeva Street. They comprise the Dean's office (37 square metres), the Human resources management unit (39 square metres), the Secretary General's office (12 square metres), the Office for undergraduate study (30 square metres), the Centre for Postgraduate and Lifelong Learning (12 square metres), the Office for research activities, the Office for international activity, the Office for lifelong learning activities, the Secretariat of the NVI (7 square metres), the Department of Anatomy, Histology with Embryology and Cytology and the Department of Biochemistry, Molecular Biology and Genetics (532 square metres), the Department of Physiology, Pathological Physiology and the Department of Pharmacology and Toxicology (462 square metres), the Department for Breeding and Health Care of Wild Animals, Bees and Aquaculture (335 square metres), the Department for Virology, Bacteriology and Mycology (1,481 square metres), the Department of Pathology, Forensic and Administrative Veterinary Medicine (1,034 square metres), and the Food Safety Department (756 square metres).

Another location is approximately 500 m away on the Cesta v Mestni log street. The complex of clinical buildings consists of the Small Animal Clinic (865 square metres), the Clinic for Ruminants and Pigs (770 square metres), the Clinic for Reproduction and Horses with the Outpatient's department for horses (913 square metres), the Institute of Poultry, Birds, Small Mammals and Reptiles (591 square metres), the Clinic for Breeding and Health Care of Horses (112 square metres), the Department of Environment, Animal Nutrition, Welfare and Hygiene (484 square metres), the Centre for Genomics from the Department for Biochemistry, Molecular Biology and Genetics (139 square metres), the Centre for Informatics and the Library with the Computer Centre (294 square metres).

All clinical buildings are on the ground floor and accessible to people with reduce mobility. For other buildings we have the portable wheelchair lift STAIR CLIMBER SA-3. It has a powerful motor which allows a small attendant to safely transport a larger passenger up and down stairways. Stair Climber is suitable for indoor or outdoor use and was recommended by the Association of Disabled People of Slovenia.

Equipment is maintained by the individual department or unit by qualified internal staff. Regular checks and internal or external audits on facility maintenance, work safety, animal welfare standards, biosecurity and environmental safety are carried out by qualified auditors

In our faculty, the standard of biosecurity applies to virtually all areas of work, notwithstanding the fact that in some parts of the faculty the limitation is the relatively outdated architecture and thus the location of rooms and areas for the study process. Nonetheless, the prescribed biosecurity standards are implemented through appropriate adjustments and modifications based on clean and unclean pathways, change of work clothes and footwear, use of gloves and hand disinfection. The VFLJ also performs the duties of NVI where educational staff in the field of animal health and microbiology participate in the preparation of infectious disease regulations at the state level. Some of these experts are also heads of national reference laboratories for certain animal diseases and are members of the state action group in case of an outbreak of a contagious animal disease. Knowledge and experience in the field of animal diseases with the associated biosecurity procedures are thus put into practice in a practical and successful manner during the course of study. Each student is required to take a biosecurity and biosafety exam at the beginning of the 1<sup>st</sup> year. In addition, biosecurity training is provided annually for staff (lecturers) and for students in the first lecture of each animal health subject in accordance with Biosafety Manual (Appendix 9).

Biosecurity and biosafety measures in all areas are controlled by The Commission for Biosecurity, which reports directly to the dean. The institution follows the strict biosafety and biosecurity procedures and regulations required by legislation. The security measures in all relevant areas are in accordance with Slovenian security regulations for which training, consultancy and performance review are provided by the external contractor Security Institute. The use of experimental animals is closely monitored and controlled according to national and international regulations. All facilities for animals are approved (U34401-23/2013/6 (23.8.2013); U34401-23/2013/14 (27.8.2014); U34401-23/2013/14/17 (25.1.2016); U34401-23/2013/19 (28.4.2016); U34401-23/2013/24 (13.10.2020)) and controlled by the state administration (UVHVVR).

All facilities have internet access.

The Centre for sustained re-cultivation Vremščica, where a faculty farm is located, is in the Karst region, about 60 km from Ljubljana. It consists of about 400 hectares of pastures and meadows mostly on the slopes of Vremščica and is also partly in the valley below. The premises are at two locations. At the foot of the hill there are stables for animals, barns, garages for machines, an office and a provisional settlement for the personnel. On the plateau below the top of the hill is a cheese dairy, a summer dwelling for the personnel and smaller premises for teaching.

SVP has a Small Animal Clinic (100 square metres) and a Large Animal Clinic (150 square metres).

Within the NVI there are regional units in: Murska Sobota, Maribor/Ptuj, Celje, Novo mesto, Kranj/Naklo and Nova Gorica where students can practice in the laboratories and in the fields.

**4.2 Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food service facilities.**

**Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.**

### Premises used for theoretical, practical and supervised teaching

**Table 4.2:** Premises for clinical work and student training

Species	Premises	2017	2018	2019
Small animals	No. of consulting rooms	8	8	8
	No. of surgical suites	4	4	4
Equine and food animals	No. of examination areas	4	4	4
	No. of surgical suites	3	3	3

<i>Exotic animals</i>	<i>No. of consulting rooms</i>	<i>1</i>	<i>2</i>	<i>2</i>
	<i>No. of surgical suites</i>	<i>1</i>	<i>1</i>	<i>1</i>

**Table 4.3: Premises for lecturing**

<b>Number of places per lecture hall</b>									
<i>Hall</i>	<i>No. 1</i>	<i>No. 2</i>	<i>No. 3</i>	<i>No. 4</i>	<i>No. 5</i>	<i>No. 6</i>	<i>No. 7</i>	<i>No. 8</i>	<i>No. 9</i>
<i>Places</i>	<i>80</i>	<i>72</i>	<i>60*</i>	<i>50</i>	<i>50*</i>	<i>50</i>	<i>50*</i>	<i>32*</i>	<i>30</i>
<i>Total number of places in lecture halls: 474</i>									

\* The lecture room can be used for both purposes described in Tables 4.3 and 4.4. Legend: No. 1: Large lecture room, Cesta v Mestni log 47, cross building;

No. 2: Department of Physiology, Pharmacology and Toxicology, Gerbičeva 60, building A;

No. 3: Department of Anatomy, Histology with Embriology and Citology, Gerbičeva 60, building A; No. 4: Department of Anatomy, Histology with Embriology and Citology, Gerbičeva 60, building A;

No. 5: Department of Pathology, Forensic and Administrative Veterinary Medicine, Gerbičeva 60, building for diagnostics;

No. 6: Department of Breeding and Health Care of Wild Animals, Bees and Aquaculture, Gerbičeva 60, building A;

No. 7: Human resources management unite-postgraduate lecturing room, Gerbičeva 60, building A; No. 8: Department of Bacteriology and Virology, Gerbičeva 60, building for diagnostics;

No. 9: Clinic for Ruminants and Pigs, Cesta v Mestni log 47, west building

**Table 4.4: Premises for group work (number of rooms that can be used for supervised group work)**

<b>Room</b>	<b>No. 1</b>	<b>No. 2</b>	<b>No. 3</b>	<b>No. 4</b>	<b>No. 5</b>
<i>Places</i>	<i>8x5</i>	<i>25</i>	<i>20</i>	<i>25</i>	<i>12</i>

No. 1: Small Animal Clinic, Cesta v Mestni log 47, east building;

No. 2: Department of Breeding and Health Care of Wild Animals, Bees and Aquaculture, Gerbičeva 60, building A;

No. 3: Informational Centre and Library, Cesta v Mestni log 47, central building; No. 4: Small lecture room, Cesta v Mestni log 47, cross building;

No. 5: Informational Centre and Library - Computer Centre, Cesta v Mestni log 47, central building;

**Table 4.5: Premises for practical work (number of laboratories for practical work by students)**

<b>Laboratory</b>	<b>No. 1</b>	<b>No. 2</b>	<b>No. 3</b>	<b>No. 4</b>	<b>No. 5</b>	<b>No. 6</b>	<b>No. 7</b>	<b>No. 8</b>	<b>No. 9</b>	<b>No. 10</b>	<b>No. 11</b>
<i>Places</i>	<i>3x25</i>	<i>2x10</i>	<i>2x10</i>	<i>21</i>	<i>15</i>	<i>15</i>	<i>12</i>	<i>10</i>	<i>10</i>	<i>5</i>	<i>5</i>
<i>Total number of places in laboratories: 208</i>											

No. 1: Department of Physiology and Pharmacology and Toxicology, Gerbičeva 60, building A, Food Safety Department and Department of Bacteriology and Virology;

No. 2: Clinic for Reproduction and Health Care of Horses, Cesta v Mestni log 47, EAST building;

No. 3: Department of Breeding and Health Care of Wild Animals, Bees and Aquaculture, Gerbičeva 60, building A;

No. 4: Department of Pathology Forensic and Administrative Veterinary Medicine, Gerbičeva 60, building for diagnostics;

No. 5: Clinic for Ruminants and Pigs (for pigs), Cesta v Mestni log 47, west building;

No. 6: Department of Anatomy, Histology with Embriology and Cytology, Gerbičeva 60, building A;

No. 7: Clinic for Ruminants and Pigs, Cesta v Mestni log 47, west building;

No. 8: Clinic for Ruminants and Pigs, Cesta v Mestni log 47, west building;

No. 9: Clinic for Reproduction and Health Care of Horses – Outpatient's department, Cesta v Mestni log 47;

No. 10: Institute of Poultry, Birds, Small Mammals and Reptiles, Cesta v Mestni log 47, exotic animal unit, west building;

No. 11: Centre for Genomics from the Department of Biochemistry, Molecular Biology and Genetics, Cesta v Mestni log 47, east and cross building;

Premises for student accommodation for the clinical rotation include 3 rooms, a living room and a small kitchen (80 square meters). Small lecture room at cross building (C. v Mestni log) is a student group room in the time of COVID-19.



The Management Board is responsible for all decisions concerning changes and developments in facilities and equipment. The Management Board discusses these plans with the senate that confirms the plans. The Management Board gets the required information for decision making from the departments and administration unit - Warehouse office.

#### 4.3 The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the Establishment for teaching purposes must:

- be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students
- be of a high standard, well maintained and fit for the purpose
- promote best husbandry, welfare and management practices
- ensure relevant biosecurity and bio-containment
- be designed to enhance learning.

Premises used for clinics and hospitalisation

**Table 4.1:** Places available for hospitalisation and animals to be accommodated

	Species	No. places		
		2017	2018	2019
Regular hospitalisation	Cattle	8	8	9
	Cattle - SVP			6
	Horses	11	11	11
	Small ruminants	10	10	10
	Pigs	9	9	9
	Dogs	14	14	14
	Cats	8	8	8
	Other (exotic pets)	4	10	10

Isolation facilities	Farm animals and horses	4	4	4
	Farm animals - SVP			2
	Small animals	5	5	6
	Small animals - SVP			1
	Other (exotic pets)	2	2	4

#### Premises for animals

The Centre for sustainable re-cultivation Vremščica, which is a faculty farm, has 580 sheep (most of them are an indigenous Slovenian breed), 6 cattle, 3 horses, 1 donkey and 7 pigs (Slovenian indigenous breed). Students are mostly trained in helping ewes to give birth in early spring.

Besides the VFLJ, the Biotechnical Faculty, the Department of Zootechnics takes advantage of the premises for training their students.

The Centre is also used for different research programmes and projects from the VFLJ and Biotechnical Faculty.

Animals for teaching purposes are also maintained in the clinics (pigs, cattle and horses) in stables that are approved by the competent authority (UVHVVR) for use for procedures on animals for educational purposes.

The VFLJ has over one hundred of contractual arrangements with private veterinary clinics, three contracts with farmers, one with a slaughterhouse for large animals, one with a stud farm, one with a dairy



cattle farm, one with an animal shelter, with the Ljubljana Zoo and the Ministry of Internal Affairs (Police working dogs and horses).

**4.4 Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the Establishment must unequivocally demonstrate that standard of education and clinical research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures.**

**For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH.**

**The Establishment must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector.**

**The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.**

All our Clinics are part of our Veterinary teaching hospital. 24/7 emergency service for companion and large animals is provided 365 days per year. On-call service is available for horses and ruminants 24/7 at the Faculty and 24/7 emergency service at Clinic in Žalec in SVP. All patients are presented to students by academic staff trained to teach and performing clinical research. Students have access to all relevant facilities. They rotate between species and specialities within VTH and at the SVP. Students are organised into small groups which enables indirect monitoring and good hands-on exposure between procedures and cases throughout individual rotation.

Students have to log procedures in their log documents which is signed off by the direct supervisor and clinical rotations coordinator. Only procedures done by students are recorded in the log document.

Our teaching standards exceed the best available in the private sector.

**4.5 The Establishment must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.**

**The Diagnostic Biochemistry Laboratory at the Small Animal Clinic** comprises two laboratories; the Haematology and Biochemistry laboratories. The Diagnostic laboratory offers haematological, biochemical, coagulation, urine and blood gas analysis, as well as staining of different types of samples, preparation of cytospin slides from body fluids, rapid diagnostic tests for infectious diseases for carnivores and rapid tests for the determination of feline and canine blood groups.

Haematological analysis, complete blood count, white cell differential and reticulocyte count are performed with an automated laser haematology analyser (ADVIA 120 Siemens, Germany). The analyser utilises the principle of automated cytochemistry coupled with flow cytometry and can be used for human and animal blood samples (dog, cat, horse, cattle, goat, pig, sheep, rabbit, monkey, mouse, rat). Biochemical analyses with the exclusion of electrolytes are performed by two automated biochemical analysers, the old RX Daytona and the new RX Daytona plus (RANDOX, Great Britain). Electrolytes, sodium, potassium and chloride are determined with an electrolyte analyser Ilyte (IL, USA). Biochemical analyses include glucose, urea, creatinine, total protein, albumin, calcium, magnesium, iron, total bilirubin, cholesterol, triglycerides, aspartat aminotransferase, alanin-aminotransferase, creatine kinase,  $\gamma$ -gamma-glutamyl-transferase, alkaline phosphatase and bile acids. Within the framework of research, antioxidant parameters such as the activity of superoxide dismutase and glutathione peroxidase, as well as total antioxidant capacity analyses are determined by biochemical analysers. For the determination of the coagulation parameters, the prothrombin time and activated partial thromboplastin time Stago Start 4 hemostasis analyser (Diagnostica Stago France) is used. Blood gas analysis is performed with the RAPID Point 500 (Siemens, Germany) blood gas analyser.

Approximately 40,000 analyses are performed every year for routine, research and educational purposes. Despite COVID-19 the number of analyses in 2020 has increased to 51,000.

**Laboratory of Clinical Pathology (haematological and biochemical) at the Clinic for Ruminants and Pigs** is included in the pedagogical activities of subjects for the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> year of study.

In the 5<sup>th</sup> semester, the students are generally informed about basic laboratory methods.

In the 9<sup>th</sup> semester, the students take an active part in laboratory practice work on the subject Diseases and Health Care of Ruminants. They perform around 200 analyses every year.

In the 11<sup>th</sup> semester, part of the subject clinical practice is also performed at the Clinic for Ruminants, where the student is actively included in practical work with hospital patients (ruminants), with patients in the field and the everyday activities in the laboratories.

Additionally, 5<sup>th</sup> year students have practical laboratory work (6 hours per week) at the Diagnostic Laboratory at the Small Animal Clinic. They are acquainted with haematological, biochemical, coagulation, urine and blood gas analyses, as well as staining of different types of samples (smears), preparation of cytopsin slides from body fluids, rapid diagnostic tests for infectious diseases and the determination of feline and canine blood groups.

The students are acquainted with haematological parameters (RBC count, complete WBC count, platelet count, Hb, Ht, MCV, MCH and MCHC) using the veterinary automatic haematological analyser Scil vet ABC Plus. They have to handle, prepare and analyse blood samples of ruminants. They have to prepare blood smears for differential white blood cell counts and blood cell morphology, which is performed by microscopic examination with a NIKON microscope, ECLIPSE 200.

In the biochemical laboratory at the Clinic for Ruminants and Pigs the students have to prepare blood samples for analysis and are acquainted with biochemical analyses, which are performed by automatic biochemical analysers RX DAYTONA and Mini Vidas (Biomerieux). The biochemical parameters that are performed are: cholesterol, bilirubin, triglycerides, total protein, albumin, urea, creatinine, phosphate, calcium, magnesium, sodium, potassium, chloride, iron, copper, glucose, enzymes AST, ALT, LDH, CK, ALP, GGT, GLDH, ketone, BHB, NEFA, cortisol, T4 and progesterone.

The students also have to perform a milk examination (the semi-quantitative O'Moore method for acetone), examination of abdominal fluid and urine examination, chemical tests and microscopic examination of urine sediment. Approximately 7,500 analyses are performed every year. Despite COVID-19 in 2020 the number of analyses has increased to 8,006.

Approximately 700 parasitology examinations are performed every year.

**Serology Laboratory at the Institute of Poultry** performed 22,000 serology analyses in the year 2018 and 23,500 in the year 2020.

**Diagnostic imaging** involves different departments at our Faculty. Two X-ray machines (Siemens Iconos R 100 and Satelec X Mind) are at the Small Animal Clinic and one portable Ecotron-EPX-R 4000 is at the Clinic for Reproduction and Horses. Two ultrasound machines (General Electric) are at the Small Animal Clinic and another portable one is at the Clinic for Reproduction and Horses. A Computed Tomography Scanner (Siemens Somatom Scope) is also at the Small Animal Clinic. There are approximately 1,700 patients per year for ultrasounds, 1,600 patients for radiology examinations and 250 for CT scans. All these machines serve as diagnostic instruments for teaching purposes, for our clinical and research work. Small groups of students have practical training, where they make diagnoses based on radiographs and ultrasonographs. In these departments they gain knowledge about radiation protection and precaution.

**The Department of Anaesthesia** at the Small Animal Clinic provides services through four full-time employed anaesthetists (two teaching positions and two clinical anaesthetists) and one PhD student who cover the anaesthesia of dogs and cats and experimental animals, including sheep and pigs. Equine anaesthesia and the anaesthesia of large ruminants and exotic pets/small mammals is provided by other clinics at the VFLJ.

The Department of Anaesthesia provides anaesthesia services in three surgical theatres, the dentistry and radiology department at the Small Animal Clinic.

Cardiopulmonary resuscitation (CPR) and critical care of surgical cases is also provided by the Department of Anaesthesia.

The Department of Anaesthesia is equipped with five small animal inhalation machines (two Dräger Ti-berius 800 with Ventillog ventilators, one Dräger fixed wall machine, three MATRX VMS small animal machines) with sevoflurane and isoflurane vaporizers and one Hallowell EMC Anesthesia Work Station for

rodents, rabbits and small exotic pets. A central gas supply for oxygen and air used as medical gases, and a scavenging system for waste gases is provided at all work places.

Monitoring devices include:

- 2 x RGM 5250 (capnography, pulse oximetry, end-tidal anaesthetic gases)
- 1 x anesthesia monitor GE Healthcare B105
- 2 x monitor Eickemeyer LIFEVET CP
- 2 x monitor BLT M9000 VET
- 1 x monitor BLT 7000 VET
- 4 x Parks Medical Ultrasonic Doppler flow detector Model 811-B (1 x) and Model 811-BL (2 x)
- 1 x Hewlett Packard Model 78354A (ECG, 2 x invasive blood pressure, body temperature)
- 1 x Hewlett Packard Model 66S (ECG, pulse oximetry, capnography, body temperature, non-invasive blood pressure and invasive blood pressure, cardiac output by the thermo-dilution method)
- 1 x locator of peripheral nerves B Braun STIMUPLEX HNS 12
- 1 x stimulator for peripheral nerves Organon teknika TOF-Watch SX

Other equipment:

- 1 x MATRX Life Defense Plus (ECG, defibrillator)
- 8 x B Braun Perfusor compact
- 10 x Short-line cages for animals (pre- and early post-operative care)

**The Cardiology Service** at the Small Animal Clinic provides diagnostic and patient care services to animals with cardiovascular diseases, and consultation within the clinic and to referring veterinarians from Slovenia and elsewhere.

The cardiology service evaluates a variety of cardiopulmonary cases in a number of different species (dogs, cats, large animals, exotics). These conditions include congenital cardiac malformations, acquired heart disease and pre-breeding screening for a variety of diseases in dogs and cats. A typical cardiac case includes thoracic radiographs (Siemens), an electrocardiogram (Philips Page Writer), an indirect systolic blood pressure (HDO Memo Diagnostics) and a full echocardiogram with Doppler evaluation (GE Vingmed System Five). All imaging is recorded on videotape and digitally for efficient reporting and reviewing at subsequent check-up examinations. Most of our patients have these tests performed on an out-patient basis with same day results. The results are also reported to the local veterinarian for enhanced continuity of care.

The possibility of Holter monitor (Delmar Reynolds, Lifecard CF) screening for arrhythmias associated with different conditions is available. Image Consultation: Cardiology service offers image reviews of materials (radiographs, ECG, etc.) mailed, emailed or faxed to the service.

**Surgery** also involves different departments of our VFLJ. It is equipped with complete AO ASIF instruments, equipment for gastroscopy, tracheobronchoscopy, endoscopy, ligasure, several electroscalpels, cliniporator for electrochemotherapy... At the Small Animal Clinic there is a central sterilization unit.

Students have access to all relevant facilities. They rotate between species and specialties within the Faculty's hospitals and at the clinic in SVP under the supervision of the faculty's academic staff. Each rotation participates in elective, emergency and hospitalised cases. Clinical rotations are subjected to clinical procedures using the basic and ancillary diagnostic and therapeutic facilities and tools available. Small groups of students on equine and production animal rotation participate in ambulatory services and in individual animal treatment or herd health problems. Students are organised into small groups which enables indirect mentoring and good hands-on exposure between procedures and cases throughout individual rotation.

### Slaughterhouse facilities

The slaughterhouse for farm animals (cattle, pigs, horses) where the majority of practical training takes place is located in Celje, 85 km from the VFLJ. The distance of the slaughterhouse is the main problem

for the practical course. Slaughtering takes place daily; on average 150-200 pigs and 100-150 cows are slaughtered daily. The rate of slaughtered horses is 5-8 per week. The slaughterhouse is registered for selling meat in the European Union.

The poultry slaughterhouse is located in Zalog 15 km from the VFLJ and it is visited once by every student where they are shown the veterinary sanitary inspection of poultry.

### **Foodstuff processing unit**

Students visit two premises for the processing and distribution of meat and meat products in two different regions in Slovenia and premises for the production and distribution of dairy products. The visits are led by a responsible employee of the food processing company and are approved by the UVHVVR.

During these visits students are taught about the practical implications of the HACCP system, technology in food processing, distribution of products and veterinary sanitary control procedures inside the premises.

### **4.6 Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for animal care and for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.**

In 2020 we have finished a new isolation facility with 2 places for big animals, 6 places for dogs, 4 for cats and 4 for exotic pets. At the VFLJ we have also one additional place for farm animals and 3 places for pigs. At the SVP we have 2 places for farm animals and one for small animals (Appendix 19).

### **4.7 The Establishment must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under academic supervision.**

On the Cesta v Mestni log street is the complex of clinical buildings: the Clinic for Ruminants and Pigs, the Clinic for Reproduction and Horses with the Outpatient's department for horses, the Institute of Poultry, Birds, Small Mammals and Reptiles and the Clinic for Breeding and Health Care of Horses.

A faculty farm is located at the Centre for sustained re-cultivation Vremščica, which has 580 sheep, 6 cattle, 3 horses, 1 donkey and 7 pigs. Students are mostly trained in helping ewes to give birth in early spring.

Students perform practical training from mare reproduction at the stud farm in Lipica where they are trained in monitoring pregnancy in mares.

SVP has a Small Animal Clinic and a Large Animal Clinic.

VFLJ has contractual arrangements with 3 farmers (with a dairy cattle farm and one with a stud farm).

### **4.8 The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.**

For student transportation we have 2 vans and 6 cars. For excursions and field trips we occasionally rent buses. There is one vehicle for the transportation of live animals.

## **Waste management**

Waste material originating from the Institutes and Clinics of the VFLJ comes from a hazardous and non-hazardous origin and comprises the following substances:

- Cadavers of small animals originating from the Small Animal Clinic.
- Cadavers of laboratory animals originating from the Department of Physiology and Pharmacology and Department of Biochemistry, Molecular Biology and Genetics (Centre for Animal Genomics).

- Cadavers of poultry and biological waste originating from the Institute of Poultry, Birds, Small Mammals and Reptiles and the Clinic for Reproduction and Large Animals.
- Biological waste originating from the Department of Pathology, Forensic and Administrative Veterinary Medicine, the Department of Bacteriology and Virology, the Department of Breeding and Health Care of Wild Animals, Bees and Aquaculture and the Department of Physiology and Pharmacology.

Regarding the rules of the law on animal waste disposal and processing, all cadavers, including the corpses and carcasses of laboratory animals and biological material from the VFLJ, all this material is classified as category 1 and category 2. Since the NVI, part of the VFLJ includes the veterinary hygiene service, responsible for animal waste disposal, the transportation of cadavers and carcasses is taken regularly to the verified animal rendering plant. Before transportation, all material is stored in refrigerated animal waste containers; the transportation itself is undertaken in vehicles designed for such transportation.

Infectious and non-infectious biological waste is removed from special containers in separate waste storehouses at the VFLJ by the contractor - the company verified for hazardous waste rendering and neutralisation. Also, hazardous waste (used needles, syringes, old drugs) is collected separately in containers and removed by the verified company.

Waste waters from the laboratories dealing with infectious materials are filtered and neutralised by sedimentation and neutralisation cesspits, maintained by the contracted company responsible for regularly sustaining the cesspits.

Chemical waste is disposed of according to the internal quality assurance policy of the faculty. The waste produced in labs is collected and stored as appropriate until disposed of by an authorised waste disposal company.

Household waste is classified either as recyclable or as disposable. These materials are collected in separate containers and are removed by the municipal waste company.

**4.9 Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The Establishment must demonstrate a clear commitment for the delivery of biosafety and biosecurity, e.g. by a specific committee structure. The Establishment must have a system of QA to monitor and assure clinical, laboratory and farm services, including a regular monitoring of the feedback from students, staff and clients.**

### **Safety training for students and staff**

To comply with the legal requirements (the Occupational Safety Act) concerning occupational health, the faculty has had the workplace risk assessment and management performed by a professional expert.

The Commission for Biosecurity is responsible for biosecurity and biosafety in all areas relevant and referring directly to the dean.

Apart from this, all employees are required to pass the workplace safety regulations exam every second year. Beside this, employees working with ionization radiation must pass a special exam on radiation safety every five years.

Students are required to pass a similar exam prior to starting the practical work. It includes various workplace-related security and safety issues, such as (but not exclusively) chemical, radiation and biosafety. Students are informed about specific job- or subject-related security and safety issues, including specific hazards, protective clothing, high risk persons (pregnancy), protection against infections, protective measures and first aid at the beginning of their practical work. Students have to pass the exam on biosecurity measures at the beginning of the 1<sup>st</sup> year. In addition, yearly education about biosecurity measures is performed for employees and students according to the Biosafety Manual (Appendix 9).

Before farm visits, students are instructed in behaviour on farms, hygienic provisions and animal handling. All students have a vaccination program prescribed by the State.

VFLJ holds an accreditation according to the ISO 17025. The organisation of VFLJ is described in the Quality Assurance Manual (PK VF), general guidelines and other supporting documentation. The customer feedback is actively searched for. Every year the Quality Assurance Unit send a questionnaire with sat-



isfaction survey on the quality of our work to all our costumers (farms, farmers, private veterinary clinics) and analyses the results. The procedure of customer feedback, including complaints is described in general Guideline V 87. The results are communicated to OU in writing.

Since 2000 all the members of UL have been preparing annual self-evaluation reports on the quality of teaching, research and clinical work. The preparation of self-evaluation reports involves varies groups (teachers, students, technical staff). An important part of the evaluation are also students surveys which are presented every year to teaching staff. Students participate in the online survey about separate course and academic staff when they register for the exam on the course. Through the survey students express their opinions on the course and pedagogical work of teachers, on the study process and on the study practice. All other students' complaints are collected in the separate map at the dean office.

On every clinic there is a book of compliments and complaints where the clients can express their own opinion about the quality of our work. Compliments and complaints are also received through the website of VFLJ, through Facebook and phone on a daily basis.

All defined safety measures must be respected at all times by employees as well as by students.

### **Future changes**

The negotiations with the UL to start building new premises for the VFLJ are in progress. A suitable location, at the location of the existing clinics of our faculty, is available at the moment for the UL's needs. A certain amount of financial resources has been allocated in the UL budget for this purpose as well. The VFLJ has already submitted all necessary documentation. There are realistic plans that the building of the new premises will start in 2 to 5 years. The estimated cost is 58 million euros.

Further, it is planned to continue the reconstruction of the old buildings at Cesta v Mestni log. Next year we plan to reconstruct the surgery department at the Small animal clinic.

### **Comments on Standard 4**

The VFLJ buildings are based at two locations (Gerbičeva 60 and Cesta v Mestni log 47). The site at Gerbičeva mostly houses the preclinical departments, the Dean's office, as well as the main building of the NVI. At Cesta v Mestni log beside the library, there are clinics and institutes dealing with clinical work. The double location of the faculty does not represent a big problem, but sometimes it is necessary to buy two machines instead of one. The buildings located at Gerbičeva 60 were erected for the faculty in the early sixties and were re-adapted in the 1990s, whereas the NVI building was constructed in 2004. The buildings at the Cesta v Mestni log location were constructed in the late thirties and completely readapted in the last few decades.

When the study of Veterinary medicine was established in 1953, the location of all buildings was out of town; nowadays, both locations are surrounded by private houses. The old buildings located at Gerbičeva 60 are already in a bad condition because they were badly constructed, and are now tilting and according to the UL's plans will be demolished in a few years.

Plans for the new faculty buildings are already finished; the new location is predicted at the location Cesta v Mestni log.

The equipment for undergraduate teaching is still in fairly good condition. Most of the apparatus used for measuring some parameters (photometers, ELISA readers, etc.) are also used in research or routine work. Some clinics complain about the lack of a modern NMR. The problem is how to buy new machines when the old ones are out of order.

Despite the coronavirus epidemy the number of clinical cases and analyses at our VTH has partially increased in 2020.

The maintenance of buildings and equipment has been managed with resources deliberately allocated by the UL Administrative board. Maintenance is also covered by budgetary funds. However, these resources have proved to be insufficient. Therefore, additional financial resources must be obtained.

### **Suggestions for improvements on Standard 4**

New faculty buildings, about which intense negotiations are taking place at the UL level, will solve the problems of the double location of the faculty and the bad condition of some buildings.

Some of the equipment will be transferred from the present locations to the new one; some of the equipment will need to be bought (NMR). The investment in new equipment could represent a financial problem.





# Standard 5: Animal resources and teaching material of animal origin

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## Factual information

**5.1 The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.**

**Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.**

### **Global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences**

VFLJ is committed to using animals for teaching and research purposes exclusively

with the required special animal welfare approval and this is coordinated with the relevant internal (The Commission for Welfare of Animals in Experimental Procedures) and external (national Ethical Committee, UVHVVR) regulatory authorities according to EU Directive 2010/63 and national regulative.

The clinics at the VFLJ are mostly species specific. All cases at the VTH are being used for undergraduate and graduate teaching; data are also used for research. VFLJ is also running a teaching farm (Sustainable Recultivation Centre Vremščica), which is dislocated from the main campus and serves as a clinical, meat and milk producing teaching unit. Autochthonous breeds of farm animals are bred there. The facilities in Vremščica are dilapidated, so we have strategically joined the project for renovation. The plan is to supply the buildings with solar energy and to renovate or upgrade the buildings with the possibility of student accommodation.

Another dislocated unit is set in a rural area, where production animal health is emphasised. Clinical rotations under the supervision of VFLJ teachers are run there (Savinjska veterinarska postaja; SVP). Several production animal farms, not directly associated with the UL, welcome VFLJ staff and students, and are utilised in the VFLJ curriculum. These farms are mostly used to teach herd health on food producing animals such as ruminants, swine, fish and poultry. Biosecurity is also taught on the abovementioned units. These farms are visited during clinical rotations or serve as teaching resources for core and elective courses. VFLJ is supporting the model where students are participating in post-mortem examination in a clinical pre-rotation year and follow their cases all the way through to necropsies and further laboratory work if need be. Concomitantly, the stages within the food chain are being taught from the farm to the slaughter house, and further into meat processing.

### **Specific strategy of the Establishment in order to ensure that each student receives the relevant core clinical training before graduation**

Intramural clinical rotation is divided between small animals, horses, ruminants, pigs and exotic animals. The exotic animal clinic admits birds, reptiles and small mammals. The small animal, equine and exotic animal clinic admits elective and referred cases, and runs a clinic where emergency/acute and chronic cases are managed electively and/or in the hospital. Some production animals are also hospitalised for more comprehensive medical management. All hospitals see an adequate number of cases for students to be exposed to a variety of medical problems.

Small animal clinic rotations are divided among specialties; whereas intramural clinical rotations on other animal species are generalised and expose students to a variety of problems from individual animal consultations to complicated emergency services in internal medicine and surgery. The number of animals seen by students is documented in Table 5.1.3.

Equine and production animal clinics offer field services, which mostly focus on first opinion cases. Production animal clinical services ensure that students have significant population medicine exposure.

Extramural clinical training is mostly provided by veterinary practices in Slovenia. Between 10 and 20% of students go abroad for extramural clinical training. Most cases seen during extramural clinical training are first opinion cases. Students must spend a minimum of 12 contact days on an extramural clinical training programme in a production animal setting, which includes a minimum of four emergency duties. The remaining requirements (38 contact days) of extramural clinical training are done on animal species of students' individual preference.

### **Procedures developed to ensure the welfare of animals used for educational and research activities**

Animal use protocols for educational and research purposes are governed according to the European (2010/63/EU) and Slovene (Animal Protection Law 38/13, 21/18, 92/20; Rules on the conditions for conducting experiments on animals 37/13, 89/14) legislation. Prior to the use of laboratory animals in procedures used for teaching and research in the VFLJ, the procedure must be agreed upon with the person responsible for the welfare and care of the animals in the VFLJ. For procedures that cause equivalent or greater pain or distress as that caused by the introduction of a needle, the detailed description of the procedure must be prepared on the prescribed form for the use of animals in procedures. The first level of assessment is the person responsible for the welfare and care of the animals at VFLJ, the application with the description of the procedures, animals and users is forwarded to the official veterinarian at the UVHVVR who forwards the application to the national Ethics Committee at the MKGP. If the Ethics Committee approves the procedure on animals, the UVHVVR prepares an animal use authorization document. Only when the UVHVVR approval for the specific use of animals is obtained, the healthy animals are used for teaching and research. The person responsible for the welfare and care of animals in the VFLJ maintains records of these procedures on animals. Currently, the VFLJ has permits for undergraduate training on rainbow trout, horses, rats, and rabbits (UVHVVR: U34401-25/2019/4 and U34401-25/2019/14), for procedures on rats and mice for the training of persons working on animals for research and educational purposes (UVHVVR: U34401-26/2017/7) and for the work on isolated tissues of killed animals (U34401-8/2018/4; U34401-8/2018/8; U34401-21/2016/5). Procedures on animals that are non-invasive are evaluated by the The Commission for Welfare of Animals in Experimental Procedures.

### **How the cadavers and material of animal origin for training in anatomy and pathology are obtained, stored and destroyed**

Anatomy of domestic and exotic animals: practical course is based on the dissection of dog cadavers with detailed inspection of topographical relation of structures in different body parts (4 to 5 students per cadaver) and dissection of fresh cadavers (poultry, rabbits, mice). All dog cadavers are obtained from animal shelters, where they are legally euthanized for reasons unrelated to the educational process, and then at our premises fixed by perfusion with paraformaldehyde solution and stored in a cold room. During the dissection course the cadavers and body parts are immersed in the 1% water solution of phenoxxyethanol to reduce the formalin vapors concentration. Paraformaldehyde concentration in the dissection room is periodically measured with formaldehyde detector and was also controlled by the accredited institution (Institute of Occupational Safety). Students perform a dissection in the anatomy dissection room, which is equipped with forced ventilation, and are requested to use personal protective equipment. Anatomical particularities of organic systems (digestive, respiratory, reproductive organs etc.) in other species are demonstrated on either formalin-fixed, plastinated or corrosion cast specimens that are periodically renewed every few years. For this purpose, live animals are purchased from different breeders, then anesthetized, exsanguinated and fixed by perfusion with paraformaldehyde solution. All waste products (fixed and not-fixed cadavers and specimens) are taken over by the veterinary hygienic service. Our Unit for Anatomy, Histology with Embryology and Cytology is also an approved establishment by the UVHVVR (Approval No. SI B 07-22-07) for use of animal by-products for educational purposes. Manipulation with the cadavers, list of supplies, manipulation with live animals, their euthanasia and disposal of waste material are permitted and regulated by the UVHVVR. Waste formalin is stored in plastic canisters and then collected by the registered waste management company.

Pathology: Cadavers for training of necropsies are either obtained from animals regularly submitted for diagnostic purposes or from animals submitted for nonhazardous disposal. This includes animals from university clinics and from external sources (e.g. veterinary clinics, veterinary practitioners, owners). Cadavers are either fresh (shortly after euthanasia or death), cooled or frozen and thawed. After necropsies, interesting organs / tissues / cases are either cooled (for short term use), frozen (for long term storage) or fixed in 10% neutral buffered formalin and put in sealed glass jars (for long term storage). Furthermore, bi-

opsy samples of organs and tissues with interesting or rare pathological processes, are fixed in 10% neutral buffered formalin and preserved for teaching purposes as paraffin blocks.

Students should be exposed to a variety of animals and diseases entity to learn how to make descriptions of alterations, formulate diagnoses and to distinguish pathological changes from post-mortem artefacts. Moreover, students learn to apply different terminology for morphological, differential and etiological diagnoses. Finally, analysis of necropsy findings provides a better understanding of diseases mechanism and pathogenesis. Furthermore, investigations of various species foster comparative diagnostic skill in veterinary medicine in general.

For courses in zoology, animals are obtained from commercial providers like fisheries or hunters.

Carcasses, organs and tissue samples of necropsied animals are stored separately in walk-in refrigerators until removed by the local rendering plant. The material is separated into one of four different hazard and price categories and disposed of appropriately (once or twice a week):

- Necropsied and intact carcasses of large animals including horses, cattle, large zoo and wild animals are collected twice a week with individual registration of the species.
- Carcasses and internal organs of calves and small domestic ruminants and internal organs of necropsied large ruminants are removed once a week.
- Carcasses and organs of pigs, poultry, ponies, donkeys and foals are collected once a week.
- Carcasses of dogs, cats, small laboratory animals and small zoo and wild animals are collected once a week.

Additional sources of material for teaching pathology are:

- Dead animals necropsied at the Institute of Pathology, Wild Animals, Fish and Bees (about 470 animals per year, different species of farm animals, companion animals and Zoo animals).
- Dead animals are available from or in the NVI Unit Ljubljana where the second necropsy room is located at the rendering plant. The NVI Unit Ljubljana is responsible for the collection of animal cadavers and has access to about 39,000 carcasses of domestic and wild animals and to 52,000 poultry carcasses per year.

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

Species	2019	2018	2017	Mean
<i>Cattle</i>	0	0	0	0
<i>Small ruminants</i>	2	0	0	0.67
<i>Pigs</i>	1	0	0	0.33
<i>Companion animals</i>	15	15	16	15.33
<i>Equine</i>	1	1	0	0.67
<i>Poultry &amp; rabbits</i>	20	20	25	21.67
<i>Exotic pets</i>	38	38	38	38.00
<i>Aquatic animals</i>	2	2	2	2.00
<i>Others (specify)</i>				

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

Species	2019	2018	2017	Mean
<i>Cattle</i>	5	2	2	3
<i>Small ruminants</i>	12	4	4	6.67
<i>Pigs</i>	8	10	10	9.33
<i><sup>1</sup>Companion animals</i>	5	5	5	5.00

<i>Equine</i>	3	4	4	3.67
<i>Poultry &amp; rabbits</i>	0	0	0	0
<i>Exotic pets</i>	8	8	8	8
<i>Fishes</i>	52	50	48	50
<i>Bee hives</i>	10	10	10	10

<sup>1</sup> client owned animals

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

\* Each patient has to be officially recorded in the electronic patient record system of the Establishment and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient, even if it has been examined/treated by several departments/ units/clinics.

Species	2019	2018	2017	Mean
<i>Cattle</i>	703	910	1004	872.33
<i>Small ruminants</i>	144	115	166	141.67
<i>Pigs</i>	85	384	421	296.67

<i>Companion animals</i>	9,609	14,800	11,800	12,069.67
<i>Equine</i>	1040	674	920	878
<i>*Poultry &amp; rabbits</i>	11/0	7/1	8/1	8.67/1
<i>Exotic pets</i>	779	693	631	701
<i>Other (specify)</i>				

\*Poultry and rabbit farms

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

\* Each patient has to be officially recorded and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient.

Species	2019	2018	2017	Mean
<i>Cattle</i>	2072	2183	NA	2127.5**
<i>Small ruminants</i>	276	134	NA	205**
<i>Pigs</i>	144	149	NA	146.5**
<i>Companion animals</i>	5634	4895	4794	5107.67
<i>Equine</i>	460	411	NA	435.5**
<i>Poultry &amp; Rabbits</i>	70	70	NA	70**
<i>Exotic pets</i>	485	172	NA	328.5**
<i>Other (American camelid)</i>	0	9	NA	4.5**
<i>Production animals &amp; horses*</i>	NA	NA	2961	

\*Please note that horses and production animal species were documented/recorded together before 2018. In 2018 horses and production animals started to be logged separately.

\*\* Mean value of two years

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

Species	2019	2018	2017	Mean
<i>Cattle</i>	>90	>90	>90	>90

<i>Small ruminants</i>	>90	>90	>90	>90
<i>Pigs</i>	>90	>90	>90	>90
<i>Companion Animals</i>	70	70	70	70
<i>Equine</i>	70	70	70	70
<i>Poultry &amp; Rabbits</i>	0	0	0	
<i>Exotic pets</i>	80	80	80	80
<i>Other (specify)</i>				

**Table 5.1.6.** Cadavers used in necropsy

<b>Species</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>Mean</b>
<i>Cattle</i>	21	26	16	21.00
<i>Small ruminants</i>	29	26	29	28.00
<i>Pigs</i>	22	16	16	18.00
<i>Companion Animals</i>	72	63	75	70.00
<i>Equine</i>	9	12	4	8.33
<i>Poultry &amp; Rabbits</i>	490	523	548	520.33
<i>Aquatic animals</i>	50	50	48	49.33
<i>Exotic pets</i>	83	64	24	57
<i>Other (specify)-wild animals</i>	8	8	8	8

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

<b>Species</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>Mean</b>
<i>Cattle</i>	68	11	11	30
<i>Small ruminants</i>	28	4	4	12
<i>Pigs</i>	6	2	2	3.33
<i>Poultry</i>	11	7	8	8.67
<i>Rabbits</i>	1	1	1	1
<i>Aquatic animals</i>	2	2	2	2
<i>Other (wild animals)</i>	1	1	1	1

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

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

<b>Species</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>Mean</b>
<i>Ruminant's slaughterhouses</i>	8	11	11	10
<i>Pig's slaughterhouses</i>	3	4	4	3.67
<i>Poultry slaughterhouses</i>	1	1	1	1
<i>Related premises *</i>	1	2	2	1.67
<i>Others (specify)</i>				

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

### How and by who 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

Each teacher responsible for the course has to provide live animals for the purpose of teaching if required. Species, gender, age and number of animals are dependent on the course syllabus, pending consideration

and approval from the The Commission for Welfare of Animals in Experimental Procedures, or the national Ethical Committee at the MKGP. All clinical cases, which are admitted as patients through the veterinary hospital admission system, are teaching subject and require students to participate in procedures related to clinical services.

Some basic clinical courses can also use teachers' or students' animals for teaching. These animals cannot be subjected to pain that is the same or stronger than needle puncture. Teaching using such animals, and procedures done on these animals, are documented and filed with the course coordinator.

All institutes of the VFLJ, who want to keep animals for educational or research reasons and if during the teaching/learning process they suffer pain that is the same or stronger than needle puncture, have to apply for permission to perform experiments on animals from the competent authority, which is UVHVVR. Housing conditions are controlled regularly by the competent authority together with the animal welfare officer of the VFLJ according to Directive 2010/63/EU on the protection of animals used for scientific purposes. To support the animal welfare officers the VFLJ has appointed an animal welfare committee

Institutions/researchers/teachers, who intend to use animals for experimental or other scientific purposes, with a known or unknown outcome, or for educational purposes, which may cause the animal a certain level of pain, suffering, distress or lasting harm equivalent to, or higher than, that caused by the introduction of a needle in accordance with good veterinary practice have to apply for authorisation by the competent authority. All applications have to be evaluated and approved by the animal welfare officer of VFLJ before final submission to the authority. Animal welfare officers are appointed by the VFLJ according to Directive 2010/63/EU on the protection of animals used for scientific purposes. Projects within the context of doctoral theses and PhD programmes are also registered by the VFLJ and the UL and have to be checked by the animal welfare officer, if all relevant animal experiments are notified or authorised by the competent authority.

**5.2 In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organised under direct academic supervision and following the same standards as those applied in the Establishment.**

### **Organisation and management of the external sites and the involvement of students in their running**

Farm animal services are also organised at an external site. This training is under direct academic supervision and follows the veterinary faculty's standards. Students' rotations are held at this site in a 24/7 manner during the study period.

The VFLJ runs a sheep teaching farm, which is a biodynamic operation producing lambs and cheese. Several courses include this farm in their practical courses, which include, and are not limited to, food production and hygiene, herd health and clinical rotations. Students rotate on an elective basis during the lambing period from January to March and are responsible for ewe and lamb health management.

**5.3 The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.**

### **How and by who the nursing care skills are implemented and taught to undergraduate students**

Students receive their nursing skills starting with their basic clinical course in the third year of the veterinary curriculum. Further, special nursing skills are developed while students are taking specific species health management core courses in years four to six of the veterinary curriculum. By the time students reach clinical rotations in the sixth year they can independently participate in clinical and non-clinical management of different animal species.

### **Description of the group size for the different types of clinical training to guarantee hands-on training of all students**

A basic clinical skills course given in the third year of the veterinary curriculum facilitates hands-on basic clinical training on different companion and production animal species. Students are required to pass a



practical clinical exam evaluation on horses, small animals (either dogs or cats), ruminants, pigs and exotic animals (either small mammals, birds or reptiles) (6-8 students per group).

More specific clinical skills are taught in the fourth and fifth years of the veterinary curriculum, on specific animal species as described elsewhere in this document. All students are required to pass a practical exam/clinical examination on specific animal species. Group and individual clinical teaching support is provided to students during practical parts of the clinical training (5-7 students per group, if necessary, divided into smaller groups).

Clinical rotations in the final year of the veterinary curriculum require students to perform individual clinical work in small groups on different animal species. Students are responsible for the nursing and health management of individual animals and of the population. Clinical procedures directly performed by students are logged by students and certified by their clinical mentors.

More details about group size is in Appendix 6.

### **Hands-on involvement of students in clinical procedures in the different species**

Each student is required to take a biosecurity and biosafety exam at the beginning of the 1<sup>st</sup> year. Later, biosafety training is provided to students in the first lecture of each animal health subject in accordance with Biosafety Manual (Appendix 9). In addition, biosafety principles are taught to students during the Basic clinical course in the third year and before entering the clinical rotation in the 6<sup>th</sup> year of the veterinary curriculum. Veterinary hospital orientation is given at the end of the fifth year of the veterinary curriculum in a class setting, whereas each rotating group is given additional orientation at the beginning of their intramural or extra-mural clinical rotation.

Students get their basic and clinical training in the third, fourth and fifth years of the veterinary curriculum. Basic and ancillary clinical procedures are included in the training. Students entering clinical rotations in the sixth year of the veterinary curriculum should be able to provide a complete clinical service as well as nursing care to animals under the supervision of clinical mentors. Intramural clinical rotations set up enable students to further hone their clinical and nursing skills with regards to critical care, anaesthesia, diagnostic imaging and surgery in a variety of animal species.

In an extramural setting, students are involved with the external provider of clinical or veterinary regulatory services. Extramural clinical training requires students to participate in clinical processes on a basic practitioner level, as well as in a more specialised clinical setting. Extramural facilities have specific instructions on how students should participate in their processes, and how these processes are documented.

Students' inadequate performance, as well as ethical misconduct, results in a "fail" grade and failing of any clinical rotation.

### **The procedures used to allow all students to spend extended periods in discussion, thinking and reading to deepen their understanding of the clinical case and its management**

Clinical cases are discussed with mentors, and clinical procedures (intramural training) or case management (extramural training) are logged in students' clinical training documents. These documents are evaluated, discussed and signed off by students' clinical mentors. Theoretical assignments are given to students to support their clinical knowledge.

Medical records are kept for each case and include owner/agent personal information, animal identification specifics and case histories. All clinical aspects of the case history are recorded, as well as client communications if necessary. The system is not centralised; hard copies are kept on file and can be reviewed for future reference.

#### **5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the Establishment.**

##### **The patient record system**

The VFLJ record keeping system is not integrated and centralised. The Clinic for ruminants and pigs, and the exotic animal clinic keep medical records in the form of log books, which are filled by hand. The medical record identification number is the consecutive number of the patient in the medical record book.

At the Small animal clinic, Farm animal clinic (dislocated unit), Clinic for reproduction and Clinic for breeding and health care of horses, patient records are kept as a hard copy and electronically for each case and include owner/agent personal information, animal identification specifics and case histories. All clinical aspects of the case history are recorded, as well as client communications if necessary. Reproduction clinic protocols are kept in a file for artificial insemination of mares and surgical procedures that are performed by students (hands-on).

For laboratory statements, the centralised computer systems LIMS and EPI are used.

Data are available and supports internal communication, teaching and owner communication.

##### **Comments on Standard 5**

We are in process to purchase a commercial centralised animal record electronic platform to unify patient data management.

VFLJ aims to keep the number of animals used in initial skills training to the necessary minimum and increase the use of e-learning.

The use of formaline-fixed material was reduced, however it has to be eliminated as far as possible from processes at the VFLJ.

Adjustments due to exceptional COVID-19 circumstances are described in the Appendix 13. For Pathology course, the particular adjustment was as follows: At the beginning of the first wave of the COVID-19 pandemic, a set of 100 slides for histopathological practices was scanned at the Institute of Pathology, Faculty of Medicine UL. On the basis of the scanned slides we produced short films with descriptions and explanations of histopathological lesions, etiology and diagnoses, etc.; this information is usually given live to the students during the practical exercises. The scanned slides and all short films have been available to students in the e-classroom since the beginning of the online study. We also organized some zoom meetings where we have clarified some ambiguities. When the epidemiological situation allowed, we performed the practical classes in the necropsy room in such a way that the smallest possible number of participants was present - two groups of three students and two assistants.

##### **Suggestions for improvement on Standard 5**

- VFLJ should find additional financial sources to improve pre- and clinical training
- Integrated approach to follow animals through the food chain from stable to table.
- Integrated approach to follow clinical cases from admission to the final stage of the veterinary service, either discharge from the hospital and/or post-mortem diagnostic procedures.
- Modernising the record keeping system.

# Standard 6: Learning resources

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## Factual Information

**6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.**

### Description of the general strategy of the VFLJ on learning resources

The VFLJ Library provides users with all kinds of library services and information resources for study and research. With its collection it covers the field of veterinary medicine as well as related professional fields. It serves VFLJ students and personnel in terms of educational, research and professional work. It is the only library for veterinary medicine in Slovenia and is open to other users as well.

All higher education libraries of UL are included in the library information system of the UL. Development and coordination of the operation of libraries within the UL system is the responsibility of the Commission for the development of the library and information system of the UL. The VFLJ library manager is a member of this commission.

The National and University Library (Nacionalna in univerzitetna knjižnica - NUK) is responsible for the development by drafting and adopting general regulations and professional recommendations in the field of librarianship and for the training of library staff.

The library provides users with the following services: rental of library materials to the library and to home; providing information on material; training users to use the library and assistance in finding information; reviewing student research papers and doctoral theses; interlibrary loans; access to electronic information resources through the VFLJ Library website; keeping a bibliography of VFLJ researchers since 1946. Since 2006, we have been building it as a specialised database with full texts in electronic form. The collection contains 3,500 documents. About 10 copies of the proposed study materials are available in the library. The loan period is one month, which can be extended if the material is not reserved. There is also a copy available in the reading room of the library. This copy can be borrowed on Friday after 13.00 and returned on Monday morning.

For the 1<sup>st</sup> year students and postgraduate lifelong students, training is organised on using library resources in the library and on searching through individual electronic sources such as catalogues, bibliographic databases, citation indexes, portals of publishers and providers of electronic resources and full-text e-journal packages. Library personnel present them with ways to find relevant documents. Users are also introduced to openly accessible articles, magazines and portals.

Study materials are acquired upon the recommendation of the lecturers, the wishes of the students and at librarians' professional discretion. All material is recorded in the local library catalogue and thus in the public OPAC/COBISS.

**6.2 Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by an IT expert, an e-learning platform, and all the relevant human and physical resources necessary for the development of instructional materials by the staff and their use by the students.**

**The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the Establishment's core facilities via wireless connection (Wi-Fi) and from outside the Establishment through a hosted secured connection, e.g. Virtual Private Network (VPN).**

### **VFLJ library staff and qualifications**

The library employs three full-time workers with the following qualifications: library manager: MVetSc, habilitated librarian; deputy: veterinary graduate, habilitated librarian; university graduate librarian with a professional exam.

### **Opening hours and days**

The opening hours of the library and the reading room are: Monday to Wednesday 7am - 6pm, Thursday to Friday 7am - 3pm. The library is open 49 hours a week and 40 during the holidays.

### **Annual budget**

The annual budget for 2019 was 176,000 EUR for the library, of which 73,000 EUR was for the purchase of library materials. This amount includes the purchase of, or access to, electronic materials (50,000 EUR).

### **Location in the campus, global space, number of rooms, number of seats**

The library is located between the veterinary clinics on Cesta v Mestni log 47. The total area of the library measures 300 m<sup>2</sup>: a reading room with open access shelving to study books and the latest periodicals (130 m<sup>2</sup>), a work space for professional processing of library materials (50 m<sup>2</sup>), a nearby storage (20 m<sup>2</sup>), and closed storage (100 m<sup>2</sup>). At Gerbičeva 60 there are seats in the hall on the second floor behind the barrier, which can accommodate six students.

### **Number of computers**

There are four computers available for students in the reading room, and students can also use 20 computers in a computer room located on the same floor opposite the library. All computers are on a VFLJ network. At the location on Gerbičeva 60, on the second floor there are six computers for the students and a printer.

### **Software available for bibliographical search**

The University of Ljubljana Digital Library (DiKUL) portal enables the searching of information in the global index of the EBSCO Discovery Service information discovery tool, as well as in local collections (UL library catalogues, UL repository, higher education digital collections...).

The Global Index covers global scientific and professional production from all fields of science and encompasses millions of metadata from library catalogues, from various publishers and providers of databases, magazines, books, proceedings and other material, as well as sources with full text publications (e-magazines, e-books) and free open source resources online. Some UL-specific licensed information resources may also be included in the search.

### **Brief description of the subsidiary libraries**

All departments (institutes or clinics) have libraries where they keep journals and books in their area of expertise. The material is obtained by the VFLJ library on the department's recommendation, and is recorded and sent to the department that ordered the material.

**E-learning** is organised on the Moodle platform. Information for each subject regarding content, timetables for exams, results and study material is available. Moodle is also used for e-learning (quizzes, reports from practical working, preparation of seminars, films, virtual microscope, some courses also use it for exams...). Support for our teaching staff is available at the 'Computer Centre VFLJ' and also from staff in other faculties at UL - education in teaching skills concerning IT for our professors and assistants is available at the UL level through several workshops and seminars in the projects "Digital UL - with innovative use of ICT to excellence (2017-2020)" and "Innovative and flexible forms of teaching and learning (2018-2022)".

### **The accessibility for staff and students to electronic learning resources**

All rooms in the library have Internet access via Eduroam or Wi-Fi. Access to the licensed full-text licensed databases, e-journals packages or e-books is available from computers on the UL network. The texts are accessible through a set of IP numbers or from home with a remote access password. Software with interactive models is installed in the Computer Room to explore animal anatomy through fully virtual dissections. We currently have 9 model options (pig, cattle, horse, dog, car, rat, bird, fish, frog) designed for students, teachers and professionals (Appendix 18: Skills lab).

**6.3 The Establishment must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). The use of these resources must be aligned with the pedagogical environment and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of changes in learning resources.**

### **Learning resources, Internet and internal study resources, and equipment for the development of procedural skills**

The library collection now includes 63,000 inventory units of books and other library materials.

The VFLJ library regularly receives 127 titles of domestic and foreign scientific and professional journals. We are subscribed to 87 of the most important foreign scientific journals in the field of veterinary medicine and related biomedical sciences. Most titles are covered by the Science Citation Index and Scopus. The library receives about 40 journal titles as exchange for Slovenian Veterinary Research, which is published by the VFLJ.

A certified student identity card is also a library card that gives students access to library materials from any higher education library within the UL network, including the Central Technical Library and the NUK, both affiliated with UL. The COBISS/OPAC reciprocal catalogue contains the records of all 915 participating Slovenian libraries that contribute records for 2,768,506 books, 1,943,510 articles, 146,388 magazines, 38,970 CDs/DVDs...

From the homepage of the VFLJ library (<http://knjiznica.vf.uni-lj.si/>), users have easy access to the following information resources:

- Online access to the COBISS/OPAC public library catalogue.
- Access to the list of ordered foreign journals and domestic magazines.
- Access to the list of masters and doctoral dissertations and links to them that have been available in full text since 2009.
- Access to bibliographic databases for the entire field of veterinary medicine and biotechnology: CAB Abstracts, Food Science and Technology Abstracts, AGRIS.
- Online access to the world's scientific bibliographic databases, citation indexes and freely available collections: Web of Science, Scopus, OCLC, EBSCO Host, PubMed.
- Online access to portals or full-text e-mail packages: SciDirect, Wiley Online, SpringerLink, Taylor & Francis, Sage Journals Online (access to 7,900 licensed journals) and providers of freely available e-journals, online access to e-books by Elsevier and Springer, access to over 30,000 e-books in all fields of science.

- The possibility of remote access by password to paid databases and e-journal packages. Major veterinary links are also collected.

In addition, students can use the Small Practice Room at Gerbičeva 60, where histological preparations are available for up to 10 students, and in the Anatomical Practice Room up to 20 students can practice with anatomical preparations. Pathohistological preparations are available to students, they can study on microscopes in the practice room or they can borrow preparations for a week. Two animal models are available for students to study some skills: dog Jerry and a calf (Appendix 18: Skills lab).

### **Comment on Substandard 6.3**

During the studies for the epidemic COVID-19, when it was not possible to visit the library, teachers uploaded various digital resources in E-learning on the Moodle platform to make them available to students. Histological and pathohistological preparations were scanned and are available on the e-learning platform, some laboratory and clinical practices were filmed and uploaded to the e-learning platform.

### **Comments on Standard 6**

By participating in the UL Consortium for the purchase of electronic material, we have gained access to a large number of electronic journals and books that are accessible through the set of IP numbers on the UL network. Remote access passwords are accessible from other computers, which are not on the VFLJ network.

VFLJ leadership realises the importance of e-learning and digitalisation in veterinary medicine, therefore, participation of VFLJ personnel in various projects involved in the development and implementation of curricula which includes e-learning and the acquisition of digital skills is currently underway.

### **Suggestions for improvement on Standard 6**

VFLJ should aim to enhance teachers' and students' willingness to use e-learning resources by advertising and training.



# Standard 7: Student admission, progression and welfare

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## Factual information

**7.1 The Establishment must consistently apply pre-defined and published regulations covering all phases of the student “life cycle”, e.g. student admission, progression and certification.**

**In relation to enrolment, the Establishment must provide accurate and complete information regarding all aspects of the educational programme in all advertisings for prospective national and international students.**

**Formal cooperations with other Establishments must also be clearly advertised.**

**How the educational programmes, learning outcomes, admission procedures and requirements for national and foreign students, etc. are advertised to prospective students**

The VFLJ advertises the study programme in the following ways:

- Detailed Internet information about the study programme at <https://www.vf.uni-lj.si/en/izobrazevanje/dodiplomski-studij> and further communication methods like Facebook and Instagram. There is also a link to our website from the UL website.
- Two “University (Faculty) Information Days”. One in January, so-called Informative, where all universities, faculties and also secondary schools from Slovenia present their study programmes for both future pupils and students.
- One month later is the Information day at VFLJ, where the Vice-Dean for Education and students present study programmes, student organisations, all general information about the study programme and career possibilities for veterinarians. Usually approximately 250 pupils come.
- Individual VFLJ presentations in high schools when they express a desire for our visit. The study is represented by senior students and/or teachers.
- Every year, VFLJ participates under the umbrella of the MKGP at the International Fair of Agriculture and Food. There VFLJ presents its study programme and activities.

The majority of the information about the study programme, the admission procedures and requirements, progression and certification are available online in the brochure Predstavitevni zbornik (Information booklet): <https://www.vf.uni-lj.si/en/izobrazevanje/dodiplomski-studij>. The brochure is also in printed format and is available for all those interested in the abovementioned events. The content of the brochure is prescribed with UL rules.

Information for foreign students is available at the English website: <https://www.vf.uni-lj.si/en/node/158>.

The academic calendar is first approved at UL and later on by each faculty, which can adjust the schedule to themselves, but must comply with the provisions of the Higher Education Act for a 30-week study process.

**7.2 The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.**

The number of students admitted each year is restricted. It is not calculated yearly, but was set out several years ago based on the projected retirement of veterinarians and in coordination with the Veterinary Chamber of Slovenia. Every year we track the current unemployment rate which is 15 young vets in 2019 and 33 in October 2020

**Table 7.2.1.** Number of new veterinary students admitted by the Establishment

	2019	2018	2017	Mean
<i>Standard students</i>	68	66	65	66
<i>Full fee students</i>	<i>Not relevant</i>	<i>Not relevant</i>	<i>Not relevant</i>	<i>Not relevant</i>
<i>Total</i>	68	66	65	66.3

**Table 7.2.2.** Number of veterinary undergraduate students registered at the Establishment

	2019	2018	2017	Mean
<i>First year</i>	69	75	74	72.7
<i>Second year</i>	69	63	58	63.3
<i>Third year</i>	60	55	48	54.3
<i>Fourth year</i>	50	51	56	52.3
<i>Fifth year</i>	54	47	42	47.7
<i>Sixth year</i>	42	44	56	47.3
<i>Additional year</i>	40	56	49	48.3
<i>Total</i>	384	391	383	386

**Table 7.2.3.** Number of veterinary students graduating annually

	2019	2018	2017	Mean
<i>Standard students</i>	67	48	40	51.7
<i>Full fee students</i>	/	/	/	/
<i>Total</i>	67	48	40	51.7

**Table 7.2.4.** Average duration of veterinary studies

	Number of graduates	Average duration of study in years	6 years	6 years + 1	6 years +2	6 years +3 or more
2019	67	7.5	7 (10.4%)	29 (43.3%)	20 (29.8%)	11 (16.4%)
2018	48	7.5	5 (10%)	25 (52 %)	7 (15 %)	11 (23 %)
2017	40	7.7	2 (5 %)	15 (37.5 %)	15 (37.5 %)	8 (20 %)

**Table 7.2.5.** Number of postgraduate students registered at the Establishment

Programme	2019/2020	2018/2019	2017/2018	Mean
<i>Interns</i>	0	0	0	0
<i>Residents</i>	0	0	0	0
<i>PhD students</i>	11	17	16	14.7
<i>Total</i>	11	17	16	14.7

**7.3 The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account of the fact that students are admitted with a view to their entry to the veterinary profession in due course.**

**The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the Establishment.**

**Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.**

For the uniform study of veterinary medicine at the VFLJ, candidates can be admitted:

- A. Who have graduated from a grammar school or;
- B. Who have graduated from a professional four-year secondary school programme for veterinary technicians and have passed an additional leaving exam in chemistry (an additional exam can be taken in physics or biology when chemistry has already been included in the regular final exam);
- C. Who completed grammar school or any other four-year secondary school programme before 1<sup>st</sup> of June 1995.

Each year, the VFLJ asks the MIZŠ for a limited number of candidates to be enrolled. The number of students is limited to 60 applicants. If in the regular term more than 60 candidates apply for admittance, restricted enrolment should be introduced and the applicants shall be ranked and assessed for admission as follows:

#### **Under A:**

- General score of grades in the leaving exam: 60% of points.
- General score of grades in the 3<sup>rd</sup> and 4<sup>th</sup> years of secondary school: 30% of points.
- The score of grades acquired in one of the leaving exams in natural sciences (chemistry, physics, biology): 10% of points.

#### **Under B:**

- General score of grades in the leaving examination expressed in points: 20% of points. General score of grades in the 3<sup>rd</sup> and 4<sup>th</sup> years of secondary school: 40% of points.
- Grades acquired in chemistry, physics or biology: 40% of points.

The selection of candidates is made by the University Centre for Applications and Informatics of the UL, which also takes care of the required differential examinations and examinations in chemistry, physics and biology. The 60 best applicants, i.e. those with the highest number of points, are admitted.

On the basis of the selection procedure described above, it is assumed that the enrolled students have a very similar knowledge base in scientific disciplines from their previous studies. The grammar and secondary school leaving exams are organised at the national level and are unique for the whole generation of students.

According to the Higher Education Act, in addition to the abovementioned number, an additional five per cent of applicants from non-European countries can be enrolled.

### **Admission procedures for full fee students**

The VFLJ has no full fee students.

### **How the Establishment adapts the number of admitted students to the available educational resources and the biosecurity and welfare requirements**

The present number of enrolled students represents the upper limit the VFLJ can afford, regarding the present teaching premises as well as the labour market demand.

We do not anticipate changes in the next three academic years.

**7.4 There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.**

The selection of candidates with disabilities is made by the University Centre for Applications and Informatics of the University of Ljubljana. According to UL rules, students with disabilities can be subsequently enrolled in a study programme if they achieve a minimum of 90% of the minimum points required to qualify. The special status of the candidate is granted by the competent body of the UL or an independent higher education institution on the basis of an individual application and the relevant supporting documents.

Within the CSA there is a Working Group for Special Status Students, whose responsibilities are set out in the Appendix to the Study Order at the VFLJ. The working group considers applications for special status and the possibility of adapting the study program after obtaining special status.

The above mentioned is an important topic at university level, especially in the cases of regulated study programmes. At VFLJ, 7 students (11 %) with disabilities enrolled in the programme last year. No additional funding is provided for additional students. When students are enrolled, the CSA draws up the decision about what adjustments we can make. Students must agree individually with the teachers. In recent years, teachers have been educated on how to handle such students. If a student fails to complete the prescribed obligations, he or she cannot finish VFLJ.

**7.5 The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The Establishment must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately.**

**The Establishment must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.**

### **The progression criteria and procedures for all students**

According to the provisions of the Law of higher education in the Republic Slovenia, students have one opportunity to change their study programme or to take the same year again. According to this rules they can have a status just in special situation, as prescribed in the Statute of the University in Ljubljana and that is: maternity, prolonged illness, exceptional family or social circumstances, taking part in top level professional, cultural and sports events, active participation under the working bodies of the University or Students' Organisation and the like, which has to be proved by appropriate evidence.

In order to progress to the next year, students must fulfill the conditions for admission to all exams in the current year and fulfill the obligations from the current year regarding ECTS described below (at least half of the ECTS are required for enrolment in the same year again):

- The requirement for enrolment on the 2<sup>nd</sup> year is successfully passing examinations to the extent of 57 ECTS.
- The requirement for enrolment on the 3<sup>rd</sup> year is successfully passing all first year obligations and examinations from 2<sup>nd</sup> year to the extent of 57 ECTS.
- The requirement for enrolment on the 4<sup>th</sup> year is successfully passing all previous obligations and examinations from 3<sup>rd</sup> year to the extent of 54 ECTS.
- The requirement for enrolment on the 5<sup>th</sup> year is successfully passing all previous obligations and examinations from 4<sup>th</sup> year to the extent of 50 ECTS.
- The requirement for enrolment on the 6<sup>th</sup> year is successfully passing all previous obligations and examinations from 5<sup>th</sup> year to the extent of 45 ECTS.

Re-enrolled students and those without status must complete all ECTS requirements.

### **The remediation and support for students who do not perform adequately**

The progress made by students in their studies is generally good because students are highly motivated. As mentioned several times, student and teacher contact at VFLJ is very close, so students solve a lot of their problems directly with their teachers. Otherwise, the tutorial system is available, as well as the Office for undergraduate students and the Vice-Dean for Education. Students' tutors and tutor teachers are usually the first people to help students.

For students with a disability or chronic illness, alternative examination formats in the frame of VFLJ are offered if they cannot take part in normal examinations.

At UL level, students can be supported through student organisations.

### **The advertisement to students and transparency of these criteria/procedures**

Through information on the website and meetings with students' representatives the procedures and criteria are shared among students. When there are special individual problems, students get help from staff at the student affairs office or they can turn to many different places for advice (including the student organisations, tutors, etc).

### **Rate and main causes of attrition**

The average attrition is about 12 % over all study years. About 10% of the students who started their studies at VFLJ leave VFLJ before their final exams. In most cases, they changed university or their study programme in the first 2 years. We estimate that we have good transience as a consequence of the excellent students enrolled at VFLJ. However, for the last four years we are aware of problems in the 3<sup>rd</sup> year, because in this year students started the clinical orientation. Beside this, they have the subjects Pathology and Pathophysiology, which are extensive and challenging. The new curricula should solve this problem.

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

See 7.3.

### **7.6 Mechanisms for the exclusion of students from the programme for any reason must be explicit.**

**The Establishment's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.**

### **Mechanisms for the exclusion of students**

If a student fails for the sixth time in an exam or colloquium, he/she will be excluded from the programme. Other relevant circumstances are defined in the University Discipline Rules (26.4.2018).

### **Description of the appeal processes**

In resolving student complaints, the general principles of document V 87 - Guidelines for Handling Complaints and Monitoring Other Customer Feedback is used. In resolving student complaints, the recipient of the complaint completes the prescribed form (Corrective Action - Preventive Action) indicating root cause analysis, proposed action, and monitoring of implementation of the action. The documentation is kept in the GC, the person responsible for the quality of studies is familiar with the documents, which informs the Vice-Dean for Education about the complaints and their resolution and periodically reports to the CSA.

The appeal process regarding the study process (usually dissatisfaction with the assessment) is described in the Study rules.

General compliments are addressed to the Vice-Dean for Education because she is responsible for the study process. Mediations and other meetings are organised with the aim of solving the problems.

It can happen that employees or students address an appeal directly to the Rector of UL. At UL level, the Student Complaints Commission exists.

**7.7 Provisions must be made by the Establishment to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.**

**There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).**

Students find the relevant friendly customer services at the:

- Office for undergraduate study
- Office for Scientific Research and International Affairs
- Teacher tutors
- Career counsellor and website of Career center of UL
- Students' organisations
- Clubs and organisations at UL level

Lots of information about personal hardships and all the other challenges that accompany student life can be found at UL's Career Center webpage (also available as recordings).

The mechanisms for resolution of student grievances is described under 7.6.

**7.8 Mechanisms must be in place by which students can convey their needs and wants to the Establishment. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with national and international legislation and the ESEVT standards.**

VFLJ promotes awareness that students can express their opinions through different organisations. First of all, through the Student Council, which includes representatives from each study year. Students are members of different commissions (see 3.3). Meetings are organised during each study year and at the end of the study year. In addition, students express their opinions via surveys which are discussed at different levels and are taken into account in the SER of VFLJ.

## Comments on Standard 7

- A special committee has been established as a working group of the CSA to deal with students with disabilities.
- In the 1<sup>st</sup> year, we also advertised 3 places for non-EU students. Despite the restriction, more students can enrol if they meet the enrollment points according to UL rules.
- Looking at the number of students in the different years of study, it is clear that there are problems in the progress of studies already at an early stage of the studies (first year). The new curricula, starting in 2020/2021, aims to improve study progression.
- For students who make regular progress, the state funds an additional year, which most students take advantage of. This extends the graduation period.
- Adjustments due to exceptional COVID-19 circumstances (Appendix 13): Changed conditions were adopted for proceeding to the next year, which were in accordance with the Statute of the UL. The



MIZŠ has also approved the possibility of extending student status due to the COVID-19 circumstances.

### **Suggestions for improvement on Standard 7**

- More open discussion about the number of enrolled students with external stakeholders.
- Criteria regarding student progression should be presented to students yearly so they become familiar with it.
- VFLJ promotes and supports the structure established at UL for students with physical, emotional and social needs (Psychosocial Counseling). In addition, a lot of e-material is available on the UL website.
- The VFLJ will pay particular attention to the progress of first year students.



# Standard 8: Student assessment

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## Factual informations

**8.1 The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.**

### The general student's assessment strategy of the Establishment

As a member of the UL, the VFLJ follows the instruction and rules defined in the Statute of the UL. In this document scores, general periods of examination, repetition, etc. are given. The VFLJ itself has adopted 'Study rules' regulating teaching and student assessment procedures, examination periods, appeal procedures in case of disagreements, tracking of records and recognition of achievements obtained elsewhere.

All the examinations take place in the periods when there is no teaching. There are three examination periods: winter, summer and autumn. The winter examination period takes place during the winter holidays, i.e. usually from January 15<sup>th</sup> (end of the winter semester) until February 15<sup>th</sup> (start of the summer semester). The summer period lasts from June 1<sup>st</sup> (end of the summer semester) until July 10<sup>th</sup> (start of the summer holidays). The autumn examination period usually lasts from the last week in August until September 10<sup>th</sup>. There are no exams during the teaching period for regular students.

The most used forms of examination are: written papers, multiple-choice questions, oral examination or a combination of written and oral exams, particularly in the lower (1<sup>st</sup> and 2<sup>nd</sup>) classes, whereas for clinical subjects, the students are evaluated through hands-on clinical case management and assessment of their theoretical knowledge.

The progress of students is measured not only through official exams but mostly by the numerous practical activities where students are present in small numbers (2-5) and therefore good and close contact with the teaching staff can be established. Introducing the new six year curriculum, the VFLJ is striving to implement standardised methods for the assessment of student progress.

Soft skills are assessed through clinical rotations and EPT.

**8.2 The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit. The Establishment must properly document the results of assessment and provide the students with timely feedback on their assessments.**

**Mechanisms for students to appeal against assessment outcomes must be explicit.**

### Processes for ensuring the advertising and transparency of the assessment criteria/procedures

In UL the "study rules" stated that at the beginning of each study year, prior to the commencement of its implementation, or at the introductory lecture at the latest, the teacher is obligated to inform students about:

- The content, objectives and plan of the learning unit,
- The intended study outcomes (knowledge, understanding, skills, etc.),
- Basic study literature,
- Study obligations,
- The conditions for admission to the individual assessment,
- The forms and methods of assessment,
- The assessment criteria

- Other relevant information for fulfilling study obligations (deadlines for fulfilling individual obligations, etc.).

This information has to be available online during the study process.

### The processes for awarding grades, including explicit requirements for barrier assessments

Following examinations, marks with the following binding assessment framework are used according to the Statute of the University of Ljubljana. In the right column are criteria of VFLJ

**Table 8.2**

Grade	General definition	Criteria of VFLJ
10	<i>Excellent knowledge without or with negligible mistakes</i>	91 – 100%
9	<i>Very good knowledge with minor mistakes</i>	81-90%
8	<i>Good knowledge with individual shortcomings</i>	71-80%
7	<i>Good knowledge with several shortcomings</i>	61 – 70%
6	<i>Knowledge only meets the minimum criteria</i>	51-60%
5	<i>Knowledge does not meet the minimum criteria</i>	0-50%

### Processes for providing to students a feedback post-assessment and a guidance for requested improvement

VFLJ do not have special guidance for requested improvement. The usual feedback measures are the continuously performed formative examinations during the lectures and clinical training, for example oral or online pre- and post-test. Regular and successful participation forms a prerequisite for admission to the examination. Further, discussions and reviews with lecturers, for example in the case of report writing, encourage students to reflect on their learning strategy. After written exams students have the possibility to access the examination documents and can complain and discuss it with their teacher.

### Appeal processes against assessment outcomes

According to the Statute and Study rules, any student has the right to look at the complete examination documents and to protest against the examiners' decision in written and oral exams. Students must file a complaint to the Dean, who appoints the Special commission to handle the appeal and make a decision.

In general, a maximum of three retakes of an examination is allowed. If the student submits an application and gives specific reasons, the CSA can allow a fifth retake of an exam. Fourth and fifth retakes must be in the presence of a three-member committee.

Students have to pass the examinations within a certain timeframe; this timeframe can be extended upon application by the student.

### 8.3 The Establishment must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.

Description of how and by who the students' assessment strategy is decided, communicated to staff, students and stakeholders, implemented, assessed and revised is under 3.4. The procedure is same as for curriculum.

The teacher, who is responsible for a particular course, decides on the assessment design. At pedagogical conferences, inner hospitations or other meetings, good practices, workshops are shared among teaching staff.

**8.4 Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study.**

**The Establishment must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.**

Description of the system to certify student achievement of learning outcomes in the different subjects, years of study, etc. is under 8.1.

Students are members of different commissions, so they can always express their opinions. They are also members of CC. The results of the student survey are always included in SER. In such a way, students always draw attention to the shortcomings.

**8.5 Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.**

The teaching and assessment process are the same for all students. Teachers formulate the learning goals of the course according to the Day One Competences. The students are aware of this. The use of different examination formats (oral, written, e-exams, partially in combination) allows learning outcomes, theoretical and clinical skills to be assessed according to the level of training received.

### Comments on Standard 8

- VFLJ strives to implement standardised methods for the assessment of student progress. A catalogue of learning goals is being prepared as well as a list of all courses connected to the Day One Competences.
- More efforts are directed towards developing evaluation of teachers, and giving feedback to the students. The criteria for the training of teaching staff accepted by the Senate of the VFLJ state that teaching staff should attend at least one training course in didactics per year. Some teachers participate with other veterinary faculties as external reviewers of examination questions in their field. Such a practice also exists with some VFLJ lecturers, but the process should be more formalized.
- A “teacher of the year” strategy is currently being implemented.
- The examination date is set jointly by the students and teachers one year in advance.
- Adjustments due to exceptional COVID-19 circumstances are described in Appendix 13. Additionally, for practicals in General and Specialized Histology, practical video tutorials were created, including microscopy of the slides that are normally used. The students drew slides and returned them for weekly evaluation with personal feedback. With digital slide scanner, Hamamatsu our histological glass slides were converted into high-resolution digital data. This Virtual microscope was introduced in the Moodle platform and is always accessible to students in a viewing environment as if they were operating a microscope with the NDP view2 program. The practical exam was conducted on the digital interactive screen Newline Trutouch, which was used for face-to-face projection (45 sec/slide). The students also have teamwork projects presented as tasks in Google documents or Google Jamboard where they work in groups to define structures and solve cases. Students have the opportunity to test their knowledge in weekly quizzes.
- In August 2020, Conference of Word Association from Veterinary Anatomists (WAVA) was held online. One of only 8 abstracts selected was from our faculty and described the online teaching model for histology and anatomy in the first COVID-19 epidemic period. The abstract was published in December in the journal Anatomia, Histologia and Embriologia (link: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/ahe.12639> ).

### **Suggestions for improvement on Standard 8**

- More support provided to teachers, and a willingness to introduce new teaching methods would be welcome. Those who engage in these new methods will be rewarded in some way, as will teachers who are well evaluated.
- Greater financial support would be welcome for staff development opportunities.
- More attention should be paid to rewarding excellence, not only for teaching but also for other activities (tutorial systems, international exchange, engagement of students in research, QA activities, student support services...).
- Discussion about the examination committee. Support teachers' development of regular training activities on state-of-the-art examinations.
- Providing better post-assessment feedback to students and guidance for requested improvement.



# Standard 9: Academic and support staff

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## Factual Information

**9.1 The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff.**

**A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching.**

**Most academic staff (calculated as FTE) involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.**

### **Description of the global strategy in order to ensure that all requested competences for the veterinary programme are covered and that staff are properly qualified**

The appointment of VFLJ personnel is regulated by national legislation (Employment Relationships Act) and statute and the regulations of the UL (Statute of the University of Ljubljana, Criteria for Appointment to the Titles of University Teacher, Researcher and Associate at the University of Ljubljana, Guidelines for Employment of Higher Education Teachers and Researchers of the University of Ljubljana). The procedure for the selection and training of the VFLJ personnel is described in the internal document of VFLJ: The guide on the appointment, introduction and training of staff at the Veterinary Faculty. The appointment procedure of academic staff follows these documents and guidelines.

For each staff profile, a job description is prepared stating: organisational units where work should be performed, workplace, level of education, general and more detailed job description, required education, required habilitation title, functional knowledge and skills, expected working experiences, responsibilities and working conditions. The head of the organisational unit is responsible for initiating the job vacancy procedure, and appointed is a candidate selection committee that after the prescribed selection procedure proposes the candidate for appointment. The final decision is made by the VFLJ Dean. The signatory of the employment contract is the UL Rector.

In 2020, the VFLJ Senate adopted criteria for the education of teaching staff at VFLJ. These criteria stipulate that for the first appointment to the position of a higher education teacher or assistant, training within the framework of the study program for training “Fundamentals of university didactics” in the extent of 10 ECTS is obligatory. In addition, each year the action plan provides a guideline for the training of teachers at the VFLJ, each of whom must attend at least one training course per year. However, he/she may also attend other training o coursesf his/her choice with the approval of his/her superior.

**9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, ‘adjunct’ staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment’s mission.**

**A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.**

### **The total number, qualifications and skills of all staff involved with the programme**

**Table 9.2.1.** Academic staff of the veterinary programme

<b>Type of contract</b>	<b>19/20*</b>	<b>18/19</b>	<b>17/18</b>	<b>Mean</b>
<i>Permanent (FTE)</i>	59.57	58.27	56.57	58.92
<i>Temporary</i>	6.71	6.13	6.13	6.32
<i>Interns (FTE)</i>	0	0	0	0
<i>Residents (FTE)</i>	0	0	0	0
<i>PhD students** (FTE)</i>	2.04	1.87	1.53	1.81
<i>Practitioners (FTE)</i>	0	0	0	0
<i>Others (specify) (FTE)</i>	0	0	0	0
<i>Total (FTE)</i>	68.32	66.27	64.23	67.05

\* The last full academic year prior to the visitation

\*\* young researchers participate 17% of the workload in teaching activities

In addition to the academic staff reported in Table 9.2.1, there are four permanent practitioners in the Small Animal Clinic who supervise the work of students in clinical training. At the end of 2020, we have employed a DVM for the intern position at Small Animal Clinic.

**Table 9.2.2.** Percentage (%) of veterinarians in academic staff

<b>Type of contract</b>	<b>19/20</b>	<b>18/19</b>	<b>17/18</b>	<b>Mean</b>
<i>Permanent (FTE)</i>	96	94	94	95
<i>Temporary (FTE)</i>	60	65	65	31

**Table 9.2.3.** Support staff of the veterinary programme (administration, library, technical staff, staff working for NVI and operative work).

<b>Type of contract</b>	<b>19/20</b>	<b>18/19</b>	<b>17/18</b>	<b>Mean</b>
<i>Permanent (FTE)</i>	263.45	246.16	242.68	31.96
<i>Temporary (FTE)</i>	0	0	0	0
<i>Total (FTE)</i>	263.45	246.16	242.68	31.96

**Table 9.2.4.** Research staff of the establishment (all personnel funded from research funds)

<b>Type of contract</b>	<b>19/20</b>	<b>18/19</b>	<b>17/18</b>	<b>Mean</b>
<i>Permanent (FTE)</i>	24.81	24.42	21.15	23.46
<i>Temporary (FTE)</i>	12.00	11.00	9.00	10.67
<i>Total (FTE)</i>	36.81	35.42	30.15	34.13

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

The new study programme was proposed in 2018 with the inclusion of some additional elective courses. It was implemented in the academic year 2020/2021, therefore, the prospected number of academic and support staff would increase slightly in the next 3 academic years. The increase in teaching and support staff also depends on which electives students will choose.

### **Description of the formal programme for the selection and recruitment of the teaching staff and support staff**

Teaching at UL can only be carried out by staff with a valid title, obtained through habilitation in a specific field. The conditions for obtaining a habilitation title are prescribed in The criteria for election to the titles of higher education teachers, researchers and associates of the UL. This document determines the common conditions for election to the title which are: a relevant education, demonstrated competence for scientific research and professional work according to the title applied for, demonstrated pedagogical competence, positive assessment by most reviewer of the candidate's competence and positive students' assessment for staff already performing teaching.

The internal document, The guide on the appointment, introduction and training of staff at the Veterinary Faculty determines that VFLJ personnel should be competent for the work, and specific training for separate fields of work is a planned activity. Each person employed at VFLJ prepares the yearly plan of training together with the head of the unit and the person in charge of the specific course. Realisation is checked twice a year. Pedagogical competences are assessed by students in yearly surveys and by reviewer in the process of obtaining a valid habilitation title.

### **Description of the formal rules governing outside work, including consultation and private practice**

The list of activities and the procedure for obtaining consent to perform a specific activity outside the UL are defined in The rules on avoidance of conflict of interest and conditions for work outside the UL. This document determines that an UL employee may carry out pedagogical, research, artistic, professional, consulting or other work in the fields of activities that are actually carried out by the UL and which mean or could mean for the UL the competition (competitive activity): only within the framework of the UL, or with another person with whom the UL has signed a cooperation agreement and is involved in the work subject to such a contract, or with the prior written consent of the UL and employers with whom the UL has not concluded a contract on cooperation. In the case of work of a short-term nature, a UL employee can carry out this work on his/her own behalf on the basis of invitations for individual lectures, expert opinions, reviews, etc. whose total contractual value in a calendar year does not exceed EUR 5,000. In these cases, UL consent is considered to be given.

**9.3 Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The Establishment must clearly define any systems of reward for teaching excellence in operation.**

**Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff must have a balanced workload of teaching, research and service depending on their role. They must have reasonable opportunities and resources for participation in scholarly activities.**

### **Description of the peculiarities of the work contract for academic staff**

Academic staff are required to carry out a certain amount of direct pedagogical commitment, depending on their position. For a 100% teacher's load, this is 6 hours of direct teaching time per week, and 10 hours per week for assistants. The majority of VFLJ staff is involved in different activities in different proportions. In addition to teaching activities, academic staff is also involved in research, operative work and organisational work in different proportions. The content of each can be seen in the working contract.

**9.4 The Establishment must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures.**

**Staff must have the opportunity to contribute to the Establishment's direction and decision-making processes.**

**Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.**

**Description of the programmes devoted to academic and support staff for their professional growth and development, the appraisal and promotion procedures, the mentoring and supporting procedures, their implication in the decision-making processes**

VFLJ staff is encouraged to improve their skills in teaching and assessment activities.

Faculty leadership promotes the participation at various workshops organised for the improvement of teaching and assessment skills. It also encourages the involvement in different international projects oriented towards the improvement of teaching activities, curricula, quality assurance or similar. One of the conditions for the professorship is at least three months' educational or research activities at a foreign institution in order to improve teaching and research skills.

With the Rules on Promotion to Wage Classes at the University of Ljubljana, the method and the procedure for verifying the fulfilment of the conditions for promotion to the higher salary grade are determined for UL employees. The prerequisite for promotion is work performance, which is assessed on the basis of the elements of work results, independence, creativity and precision, reliability, quality of cooperation and organisation of work and other competences related to work. The work results are evaluated in terms of the professionalism, the extent and the timeliness of the completed work and the results of student surveys.

The internal document The guide on the appointment, introduction and training of staff at the Veterinary Faculty determines that the mentor/person should be determined to introduce new personnel and should monitor the suitability of the performed work. The responsibility for overseeing the competence of the staff and preparation of the training plans at the VFLJ unit lies with the head of the unit. The head can determine the competent workers for the implementation of training.

In addition to teaching and research work, academic staff is also involved in decision making processes. It is expected that they will participate in decision making as a form of individual decision makers (Head of the unit, Dean, Rector) or as elected/appointed members of different VFLJ or UL bodies (the Senate, its working bodies, the Management Board, the NVI Council and Academic Assembly).

Criteria for the education of teaching staff state that teaching staff should attend at least one training course per year. Funding for training is usually provided in part from IRD funds. As these funds do not usually cover all the costs of training, they are combined with funds from other sources: e.g. funds for research projects, funds generated by operational work and/or work for the NVI.

**9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.**

**Description of the formal system in place for assessing the teachers by the students**

The assessment of teaching by students is defined in the Higher Education Act and the Statute of the University of Ljubljana. The assessment system follows the UL regulation described in the Student Survey Rules at the University of Ljubljana. Students participate in the online survey about separate course and academic staff when they register for the exam on the course. Through the survey, students express their opinions on the individual course and pedagogical work of higher education teachers and assistants, on the general aspects of the study process, and on the compulsory study practice, if implemented.

At the postgraduate level students evaluate general aspects of study, individual core subjects, mentoring, research within the study and professional assistance of students' office.

The Rector, the Dean, the individual teacher, the teacher responsible for the course implementation and the person responsible for the study programme have access to the evaluated answers for individual courses. The teachers are informed personally about their individual results. The results for the section on the general aspects of the study process are provided to the Rector, the Dean, the Student Council of the VFLJ and UL, the Senate of the VFLJ and to others responsible for the study process. The results of the survey are discussed at the yearly meetings with the Vice-Dean for Education and at the yearly conference for academic staff.

The students' results from the VFLJ survey are interpreted at the level of the UL, where the students' survey results from all UL members are compared and analysed (see Appendix 4).

### **Description of procedures for allocating, recruiting, promoting, supporting and assessing academic and support staff**

Once a year, an announcement of pedagogical work is prepared, which includes the names of the staff involved in the separate courses, the scope and form of their work. The announcement is made by the heads of units together with the persons responsible for the individual course. Only personnel with suitable habilitation title can independently perform teaching and assessing activities. The adequacy of the announcement is checked by the Human Resources Office. The announcement of the teaching work is part of the VFLJ Work Plan, which is considered and approved by the VFLJ Management Board, the VFLJ Senate and finally the Dean of the VF.

### **Comments on Standard 9**

In addition to academic and support staff which is included in the yearly announcement of the teaching work, as mentioned in section 9.5, experts in the field of the particular course and PhD students can participate in the teaching process. However, personnel without suitable habilitation title is supervised by the responsible academic staff listed in the announcement.

### **Suggestions for improvement on Standard 9**

Faculty leadership promotes involvement in international projects oriented towards the improvement of teaching activities, curricula and quality assurance. Currently, the personnel of VFLJ are involved in the projects to improve teaching skills ("Digital UL - with innovative use of information and communication technology (ICT) to excellence" co-financed by the Republic of Slovenia and the European Union from the European Social Fund) and curricula for some life skills ("Pan-European soft skills curriculum for undergraduate veterinary education – SOFTVETS" within the ERASMUS+ Program Project).





# Standard 10: Research programmes, continuing and postgraduate education

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## Factual Information

### **10.1 The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.**

VFLJ is actively performing research in the broad field of veterinary sciences/biomedicine. Although all teaching staff is obliged to perform some research work, the teaching position does not provide the money for conducting research and therefore, all research activities are financed through a national research agency ARRS and international projects.

We have two large research programmes financed by ARRS, which are a form of stable financing for research work. One programme named Endocrine, immune and enzyme responses in healthy and sick animals is focused on basic sciences, reproduction and clinical medicine of dogs and cats, while another research programme called Animal health, environment and food safety encompasses research work in the fields of food hygiene, the environment as well as clinical veterinary medicine of large animals and poultry. Research programmes are evaluated/reviewed by anonymous external evaluators appointed by ARRS every 5 or 6 years. The first programme was evaluated in 2018, received excellent scores and was extended for an additional 6 years. Another programme was evaluated in 2019 and also received good score and consequently further 6 years of financing.

List of publications research publication by participants in these two research programmes is in Appendix 11.

In addition to research programmes, research work is financed through research projects also supported by ARRS. However, according to national policies the funds for research projects are distributed according to a premade (more than 20 years old) distribution plan between different scientific disciplines, so we are unable to obtain more than 2 projects per year, and in most years, we are only entitled to one project, regardless of the quality of the proposals submitted. Additional sources of funding for research work are so-called “focused research projects” (CRP), for which the calls are made by the government and are focused on specific topics that are thought to be of national importance. From this source, we are obtaining some research funds, mainly for the projects in the fields of public health (studies of zoonoses) and food safety.

Slovenia is currently the country with the lowest percentage of GDP devoted to sciences among all EU countries (only 0.4% of GDP is spent on research and development). This low financing is partially hampering our research endeavors, although due to institutional policies encouraging research work, as well as stricter habilitation criteria, we are constantly striving to improve the research output from our faculty members. Between the years 2014 and 2019, our faculty members have thus published 271 scientific articles in international journals with an impact factor, of which 102 articles were published in the first quarter of journals in their respective fields. Articles by faculty members were cited 7,992 times between 2009 and 2019. We are particularly strong in some areas of basic sciences such as toxicological studies, studies of G-protein coupled receptors, neurosciences, in particular neuroendocrinology, equine physiology and sports medicine, cat and dog oncology, regenerative medicine and stem cells, epidemiology including molecular epidemiology and some others. Most of the teaching staff is actively involved and participating in research, although the research output of some of the teaching staff is not satisfactory and we are trying to stimulate such faculty members to become more active in research work through collaborations with more active researchers through financial stimulations, but also through informing the staff about possible problems with habilitations in the case of low research output.

List of all research projects at VFLJ in years 2018-2020 is provided in Appendix 10.

## **10.2 All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.**

Every student must submit an independent research work in basic science, public veterinary services, pathobiology and/or clinical sciences before graduation, which is supported and supervised by VFLJ teaching staff. This work requires a submitted paper for internal VFLJ review as well as public defence.

In the first and second years, students have an option to enrol in an elective subject “Introduction to scientific methodology”, during which they are acquainted with scientific methods and basics of evidence based medicine.

## **10.3 The Establishment must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.**

The postgraduate study/Ph.D. programme at VFLJ is run as part of the UL Ph.D. programme Biomedicine. The Ph.D. study lasts for four to five years. In the first two years students must enrol in several subjects and pass exams, while during the second year, they must prepare a thesis plan and defend the thesis plan in front of the thesis committee. These committees are usually comprised of three members. Two are usually from VFLJ and one external member, and all should be experts in the field of the proposed thesis. Also, the requirements for supervisors in the Biomedicine Ph.D. programme are quite strict and defined with quality scientific articles published in international journals. This ensures that supervisors are qualified researchers. The number of Ph.D. students at the VFLJ has been limited in recent years, partially due to low funding of Ph.D. students by ARRS. Although Slovenia has a very good programme of financing graduate students, our funds for this were limited in recent years, but recently we have succeeded in securing more funds from ARRS and we expect in the next 5 years to have at least 3 to 4 students financed from this programme yearly. The number of Ph.D. students that are not financed through the ARRS young researchers programme is also limited, as tuition fees for Ph.D. students are quite high and the study is thus not affordable for everyone as self-financed study.

A formal internship program is provided by the Equine clinic. We are in the process of establishing the unified internship program under the umbrella of the VTH on all animal species. Equine clinic is also offering an American College of Veterinary Sports Medicine and Rehabilitation (Equine) residency program in an alternative format. A generalized format of the internship and specialty (residency) programs are governed by strict employment regulations and bare strict financial obligations. According to Slovenian legislation, anybody employed for more than two years must get a tenure position. We are currently in the process of solving this legal issue to enable residents working for three years without the commitment of VFLJ to provide them with tenure. National specialisation programmes are offered in 5 different areas: Buiatrics, Poultry health management, Exotic animals, Companion/Small animals, Veterinary public health and food safety. These specialisation programmes are aimed at clinicians, working outside the faculty, who wish to specialise in a certain field of Veterinary medicine. These students are assigned a supervisor (faculty member) from their respective field and must perform clinical work with a certain number of patients under their supervision. They must keep a logbook of all performed treatments with all the necessary explanations about the diagnostic procedures and treatments performed, and after 2 years, if successful, they are awarded the title specialist in the certain area.

Alone or in collaboration with the Veterinary Chamber of Slovenia, several seminars are organised each year, which mostly target veterinary practitioners in clinical or veterinary public health settings.

**Table 10.3.1:** Number of Ph.D. students enrolled in 2018/2019

<b>Year of Ph.D. study</b>	<b>Number of students</b>
<i>1</i>	<i>2</i>
<i>2</i>	<i>6</i>
<i>3</i>	<i>9</i>
<i>Preparing dissertations</i>	<i>4</i>

**Table 10.3.2:** Number of specialization students

<b>Specialization study</b>	<b>Number of students</b>
<i>Finished in 2018</i>	5
<i>Currently enrolled</i>	3

The Establishment must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.

See 3.2.



# Glossary

<i>Slovenian</i>	<i>English</i>	<i>Abbreviation</i>
<i>Akademski zbor</i>	<i>Academic Assembly</i>	
<i>Delovna skupina za prenovu študija</i>	<i>Curriculum oversight working group</i>	<i>DSPS</i>
<i>Habilitacijska komisija</i>	<i>The Habilitation Commission</i>	
<i>Javna agencija za raziskovalno dejavnost Republike Slovenije</i>	<i>Slovenian Research Agency</i>	<i>ARRS</i>
<i>Kolegij veterinarskih klinikov</i>	<i>The College Of Veterinary Clinics</i>	
<i>Komisija za biovarnost</i>	<i>The Commission for Biosecurity</i>	
<i>Komisija za dobrobit živali v poskusne namene</i>	<i>The Commission for Welfare of Animals in Experimental Procedures</i>	
<i>Komisija za kakovost študija</i>	<i>The Commission for Quality of Study</i>	<i>CQS</i>
<i>Komisija za mednarodno sodelovanje</i>	<i>The Commission for International Cooperation</i>	
<i>Komisija za podiplomski študij</i>	<i>The Postgraduate Study Commission</i>	
<i>Komisija za študijske in študentske zadeve</i>	<i>The Commission for Study and Student's Affairs</i>	<i>CSSA</i>
<i>Komisija za študentske zadeve</i>	<i>The Commission for Student's Affairs</i>	<i>CSA</i>
<i>Komisija za zagotavljanje kakovosti</i>	<i>The Commission for Quality Assurance</i>	<i>CQA</i>
<i>Komisija za znanstvenoraziskovalno delo</i>	<i>The Commission for Scientific Research</i>	
<i>Kurikularna komisija</i>	<i>The Curriculum Commission</i>	<i>CC</i>
<i>Merila za akreditacijo in zunanjo evalvacijo visokošolskih zavodov in študijskih programov</i>	<i>Criteria for the accreditation and external evaluation of higher education institutions and study programmes</i>	
<i>Ministrstvo za kmetijstvo, gozdarstvo in prehrano</i>	<i>Ministry of Agriculture, Forestry and Food</i>	<i>MKGP</i>
<i>Ministrstvo za šolstvo, znanost in šport</i>	<i>Ministry of Education, Science and Sport</i>	<i>MIZŠ</i>
<i>Nacionalna agencija za kakovost visokega šolstva</i>	<i>Slovenian Quality Assurance Agency for Higher Education</i>	<i>NAKVIS</i>
<i>Nacionalni veterinarski inštitut</i>	<i>National Veterinary Institute</i>	<i>NVI</i>
<i>organizacijska enota</i>	<i>Organisational unit</i>	<i>OE</i>
<i>Plan UL, Veterinarske fakultete za leto 2019</i>	<i>Plan of the UL, Veterinary Faculty for 2019</i>	
<i>Poslovník kakovosti</i>	<i>Quality Assurance Manual</i>	
<i>Pravila o notranji organiziranosti in delu Veterinarske fakultete Univerze v Ljubljani</i>	<i>Rules on Internal Organization of Veterinary Faculty University of Ljubljana</i>	
<i>Resolucija o raziskovalni in inovacijski strategiji Slovenije 2011–2020</i>	<i>Resolution on Research and Innovation Activities (2011-2020)</i>	
<i>Savinjska veterinarska postaja (in Žalec)</i>	<i>Savinjska Veterinary Practice (in Žalec)</i>	<i>SVP</i>
<i>Standardni operativni postopek</i>	<i>Standard Operating Procedures</i>	<i>SOP</i>
<i>Strokovni svet NVI</i>	<i>NVI Council</i>	
<i>Študentski svet</i>	<i>Student Council</i>	
<i>Univerza v Ljubljani</i>	<i>University of Ljubljana</i>	<i>UL</i>
<i>Uprava za varno hrano, veterinarstvo in varstvo rastlin</i>	<i>Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection</i>	<i>UVHVVR</i>
<i>Upravni odbor</i>	<i>Management Board</i>	<i>UO</i>
<i>Veterinarska fakulteta</i>	<i>Veterinary Faculty</i>	<i>VFLJ</i>
<i>Veterinarska zbornica Slovenije</i>	<i>Veterinary Chamber of Slovenia</i>	
<i>Vodila</i>	<i>Guidelines</i>	
<i>Zakon o veterinarskih merilih skladnosti</i>	<i>Law on Veterinary Compliance Criteria</i>	

<i>Zakon o veterinarstvu</i>	<i>Veterinary Act</i>	
<i>Zakon o visokem šolstvu</i>	<i>The Higher Education Act</i>	

# Abbreviations

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**ARRS:** Slovenian Research Agency (Javna agencija za raziskovalno dejavnost Republike Slovenije)

**CQA:** Commission for quality assurance

**CQS:** Commission for quality of study

**CPR:** Cardiopulmonary resuscitation

**CRP:** focused research projects (ciljni raziskovalni projekti)

**CSQ-HE:** Competence-Screening-Questionnaire for Higher Education

**CSA:** Commission for Student's Affairs

**CSSA:** Commission for Study and Student's Affairs

**DSPS:** Curriculum oversight working group (Delovna skupina za prenovo študija)

**DVM:** Doctor of Veterinary Medicine

**CC:** Curriculum Commission

**EAEVE:** European Association of Establishments for Veterinary Education

**ECTS:** European Credit Transfer System

**EPT:** External Practical Training

**ESEVT:** European System of Evaluation of Veterinary Training

**ESG 2015:** Standards and Guidelines for quality assurance in the European Higher Education Area, 2015

**FVE:** Federation of Veterinarians of Europe

**EVERI:** European Veterinarians in Education, Research and Industry

**FTE:** Full-time equivalent

**IRD:** individual research work (individualno raziskovalno delo)

**ICT:** information and communication technology (informacijska in komunikacijska tehnologija)

**IQM-HE:** Internal Quality Management in Higher Education

**MKGP:** Ministry of Agriculture, Forestry and Food (Ministrstvo za kmetijstvo, gozdarstvo in prehrano)

**MIZŠ:** Ministry of Education, Science and Sport (Ministrstvo za izobraževanje, znanost in šport)

**NUK:** The National and University Library (Nacionalna in univerzitetna knjižnica)

**NAKVIS:** Slovenian Quality Assurance Agency for Higher Education (Nacionalna agencija za kakovost visokega šolstva)

**NVI:** National Veterinary Institute

**OU:** Organizational Unit

**PDCA:** Plan, Do, Check, Act

**QA:** Quality assurance



**SER:** Self-evaluation report

**SIRD:** (Veterinary Chamber) Section for education, research and diagnostics (Sekcija (Veterinarske zbornice) za izobraževanje, raziskovanje in diagnostiko).

**SOP:** Standard Operating Procedure

**SVP:** Savinjska veterinarska postaja

**SWOT:** Strengths, Weaknesses, Opportunities, Threats

**UVHVVR:** Administration of the Republic of Slovenia for Food Safety, Veterinary Sector and Plant Protection (Uprava za varno hrano, veterinarstvo in varstvo rastlin)

**UL:** University of Ljubljana

**VFLJ:** The Veterinary Faculty University of Ljubljana

**VTH:** Veterinary Teaching Hospital

# Appendices

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