UNIVERSITY OF LEÓN

Faculty of Veterinary

Self-Evaluation Report
SER 2024

4-8 March, 2024

Table of contents

List of appendices *(annexed as separate archive)*

Acknowledgments

This Self-Evaluation Report is the result of the collective efforts of everyone in the Faculty of Veterinary of León -students, support staff, and academic staff-. We followed the ESEVT SOP Leipzig 2023 guidelines, seeking input and fine-tuning from the FVULE members. The final seal of approval came from the Faculty Board on December 22, 2023.

We thank to all the contributors who generously shared factual data and specific information. We want to acknowledge the effort and collaboration of the University's governing team in preparing the self-report and organizing the visit.

We trust that this self-report will provide a suitable basis for the evaluation work that the Experts Team will carry out in March in León.

List of contributors

María Teresa Carbajo Rueda
José Gabriel Fernández Álvarez
María José Ranilla García
José María Fresno Baro

Liaison Officer

Ana Balseiro Morales

List of acronyms and abbreviations

- **ACA**: Active Collaboration Agreement
- **ACSUCYL**: Agency for the Quality of the University System of Castilla y León
- **AHS**-OVS: Animal Health's Official Veterinary Service
- **ANECA**: National Agency for Quality Assessment and Accreditation
- **APHR**: Animal Production and Health Rotation
- **BOCYL**: Castilla y León Region Official Bulletin
- **BOE**: Spanish Official Bulletin
- **CCT**: Core Clinical Training
- **CRAI-TIC**: Learning and Research Resources Centre
- **D1C**: Day One Competences
- **DMCFVULE**: Degree Monitoring Committee of the Faculty of Veterinary of León
- **EAEVE**: European Association of Veterinary Education Establishments
- **EBVS**: European Board of Veterinary Specialisation
- **ECTS**: European Credit Transfer and Accumulation System
- **EEPT**: Extracurricular External Practices
- **ENQA**: European Association for Quality Assurance in Higher Education
- **EPC**: External Practices Committee
- **EPT**: Elective Practical Training
- **ESEVT**: European System for the Evaluation of Veterinary Education
- **ESG**: Guidelines for Quality Assurance in the European Higher Education Area
- **FAMP**: Farm Animal Medicine Programme
- **FBFVULE**: Faculty Board of the Faculty of Veterinary of León
- **FDP**: Final Degree Project
- **FGULEM**: General University and Business Foundation
- **FPP**: Pilot Plant of food Technology
- **FTE**: Full Time Equivalent
- **FVULE**: Faculty of Veterinary Medicine of León
- **GID**: Teaching Innovation Groups
- **HACCP**: Hazard Analysis and Critical Control Points
- **HISA**: Hygiene Inspection and Food Safety
- **IQAS**: Internal Quality Assurance System
- **LOSU**: Organic Law on Universities
- **OEC**: Quality and Evaluation Office
- **OIE**: World Organisation for Animal Health
- **OVS**: Official Veterinary Service
- **PAID**: Teaching Innovation Support Plan of the Universidad de León
- **PDA**: Academic Dedication Plan for Teaching and Research Staff
- **PDI**: Teaching and Research Staff
- **PH-OVS**: Public Health's Official Veterinary Service
- **PTGAS**: Technical, management and administration and service staff
- **QCFVULE**: Quality Committee of the Faculty of Veterinary of León
- **RHTA**: Food Hygiene and Technology Rotation
- **RUCT**: Registry of Universities, Establishments and Titles
- **SAEX**: Animal Experimentation Service
- **SEPT**: Supervised External Practical Training
- **SER**: Self-evaluation Report
- **SICULE**: Informatics and Communications Service of the ULE
- **SOP**: Standard Operating Procedures
- **SOVS**: Slaughterhouse Official Veterinary Service
- **SPFVULE2015-20**: Strategic Plan 2015-2020
- **SPFVULE2022-24**: Strategic Plan 2022-2024
- **TFULE**: Teaching Farm of the University of León
- **TG**: Teaching Guides
- **TPT**: Tutored Practical Trainings
- **ULE**: University of León
- **VHULE**: Veterinary Teaching Hospital

INTRODUCTION

Brief history of the Faculty and previous ESEVT visits

The Faculty of Veterinary Medicine of León (FVULE) is the oldest centre at the University of León. It was founded in 1852 as a Subaltern School of Veterinary Medicine, acquiring later the rank of Faculty of Veterinary Medicine, in 1943. The University of León (ULE) was created in 1979, being the Faculty of Veterinary Medicine the main argument for the foundation of this new University. It was in 1996 when the curricula were adapted to the requirements of the EU directive on the training of the veterinary profession (Dir. 1027/78), also considering the professional regulation that included the Directive 2005/36/CE, relative to the recognition of Professional Qualifications of Health Professions, and the Law 44/2003 (BOE of 22/11/2003). The current curriculum started in the academic year 2010-2011 and is governed by European Directive 36/2005, partially modified by Directive 55/2013, and by national legislation and the supervision of European Association of Veterinary Education Establishments (EAEVE).

The FVULE was the first Veterinary Faculty in Spain to be evaluated by the European Union's Advisory Committee for Veterinary Education in May 1989. Subsequently, it received a new visit from the Committee, now within the framework of the Evaluation Programme of the European Association of Veterinary Education Establishments (EAEVE) in November 2001. The last visit took place in 2014, when the Committee, chaired by Dr Thierry Chambon, issued a negative report, as three category 1 deficiencies were evidenced:

- Lack of strategic plan for the Establishment and especially for its Veterinary Teaching Hospital.
- Insufficient case load in all species and as a consequence, insufficient compulsory hands-on clinical training
- Insufficient exposure to emergency cases.

The FVULE worked in the following years to address the above-mentioned deficiencies, and to train veterinarians according to EAEVE-FVE standards, based on a strategic plan approved in March 2015. Thus, in March 2017 the re-evaluation visit concluded that the deficiencies had been rectified, and the FVULE achieved the status of "Approved" by EAEVE.

Main features of the FVULE

The Faculty of Veterinary Medicine of León is the only veterinary training centre in the Autonomous Community of Castilla y León, which is the largest region in Spain (94,226 Km^2), and one of the largest in the entire European Union. However, Castilla y León experiences a high degree of depopulation and demographic ageing. The main productive sectors of this region are agriculture and livestock, together with the agri-food industry and tourism. The FVULE has 170 years of history, the oldest of the University of León, and it has always been a symbol of the city. The Faculty combines both experience and tradition, having strong social and institutional support.

In the Faculty of Veterinary Medicine of León, a well-established teaching and research team carries out its activities: This team possesses high level of preparation, accredited by years of work in this institution, and complemented by its elevated scientific and research standards, recognised both nationally and internationally. In this regard, the Faculty of Veterinary Medicine, as well as the University of León, stands out particularly in its research profile, in accordance with the dimensions analysed by different rankings, especially in the areas of "*agriculture and forestry*", "*animal science*" and "*veterinary science".*

Brief summary of the main changes since the last visit

Since the review carried out in March 2017, relevant changes have occurred both in national university legislation and in the specific regulations of the University of León.

The Faculty of Veterinary Medicine of the University of León has undergone significant changes since that last EAEVE visit, making several improvements following the indications and suggestions

of the EAEVE visiting committee. Moreover, it should be noted that the current standards (Leipzig 2023) have required a major adaptation to reach the required values. These changes are described in detail throughout the different areas of this self-evaluation report, being the most noteworthy the following ones:

Strategic Plan

The 2015-2020 Strategic Plan (SPFVULE2015-2020) was the basis for achieving the levels of quality and academic excellence that enabled the positive evaluation of the FVULE in 2017. Over the last few years, progress has been made in the plans and actions outlined in the strategic axes of the SPFVULE. However, certain aspects in specific areas need to be reformulated, and several of the initially proposed measures should be intensified. In this regard, over the last two years, an analysis has been conducted on the degree of achievement and implementation of the SPFVULE, which has been affected by the situation in 2020 due to the COVID-19 pandemic. As a result, the SPFVULE has been extended until the year 2024 (SPFVULE2022-2024).

Internal Quality Assurance System

In September 2019 the FVULE obtained the "*Certificate of Implementation of the Internal Quality Assurance System*", as a preliminary step to the "Institutional Accreditation" of the Centre, granted by the Spanish Ministry of Universities to the Faculty of Veterinary Medicine of León in December 2019, valid for five years. We consider this to be a highly important achievement for the FVULE and for the University of León itself, as it is the only centre at ULE with this quality seal.

Refurbishment of the north wing of the faculty building

In 2022, the north wing of the main building was refurbished. A total of 2,016.54 m^2 was built to provide five new classrooms, a lecture hall, a new computer room, four practice rooms, as well as five rooms for group work or small seminars.

Veterinary Hospital

Over the last few years, a revision of the infrastructure and equipment of the Veterinary Teaching Hospital (VHULE) has been undertaken, as well as the renovation of the small animal area. In 2021, a section of the hospital was modified to accommodate a magnetic resonance imaging equipment and a computed tomography scanner.

The economic strategy and business plan of VHULE have been successfully implemented, with revenues increasing by 500% over the last five years.

Associate Professor positions have been created so that clinical veterinarians linked to the Hospital and the Support Services have the status of teaching staff.

The farm animal medicine programme has increased the number of collaborating veterinarians to nine.

New collaboration agreements have been formalized with animal protection associations that collaborate with VHULE.

Veterinary Forum of Castilla y León

The Veterinary Forum of Castilla y León was constituted in 2018, with the participation of the General Council of Veterinary Associations of Castilla y León, the Union of Veterinarians of Castilla y León and the Faculty of Veterinary Medicine of León.

Major problems encountered by the FVULE

The economic resources received by the Faculty of Veterinary Medicine of León, have been insufficient due to the crisis experienced in recent years. Furthermore, the FVULE's capacity to intervene in the provision of human and material resources is limited, which greatly compromises the execution of strategic plans. This situation has been aggravated by the COVID-19 pandemic.

The average age of the Faculty's teaching staff is particularly high, which calls for immediate action to renew the teaching staff, incorporating young professors, who can be steadily trained and ensure the continuity of the teaching capacity in all areas of knowledge.

The financial management of the Veterinary Hospital does not depend on the FVULE, but is carried out by the *General University and Business Foundation* (FGULEM), although there are members of the FVULE on the VHULE Management Committee. This situation has caused some difficulties in reconciling the demands of teaching and clinical activity.

The Faculty does not have a conventional ambulatory clinic, and is not depending on the Veterinary Hospital. Instead, it has been established a “farm animal medicine programme”, which has largely addressed this deficiency in recent years.

Version and date of the ESEVT standards that is valid for visit

Standard Operating Procedure (SOP) 2023**,** as approved at the Leipzig General Assembly, 8 June 2023.

AREA 1. OBJECTIVES, ORGANISATION AND QUALITY ASSURANCE POLICY

AREA 1. OBJECTIVES, ORGANISATION AND QUALITY ASSURANCE POLICY

Standard 1.1: The VEE should have as its main objective the provision, in accordance with EU Directives and ESG Standards, of adequate, ethical, research-based and 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 VEE should develop and follow its mission statement which should encompass the ESEVT Standards.

Description of the mission statement and objectives

The main objectives of the FVULE are to ensure that graduates are able to develop their own professional activities as veterinarians in different sectors such as animal medicine and surgery, animal production and health, food technology, food hygiene and safety, and public health, and to be aware of the importance of lifelong learning.

The training programme is based on the European Directive 2005/36/EC (as amended by Directive 2013/55/EU), the Spanish legislation in force (Order ECI/333/2008. In this way, the FVULE develops teaching, research and knowledge dissemination programmes for the benefit of animals, people and the environment, through the promotion of veterinary medicine, animal health and welfare, efficient and responsible animal production, food hygiene and safety and the protection of public health.

The Verification Report of the Degree in Veterinary Medicine of the FVULE (2009) textually contemplates the following objectives:

- Hygiene control, inspection and technology of production and processing of foodstuffs for human consumption from primary production to the consumer.
- The prevention, diagnosis and individual or collective treatment and control of animal diseases, whether considered individually or in groups, particularly zoonoses.
- The control of animal husbandry, management, welfare, reproduction, protection, and feeding, as well as the improvement of animal production.
- The optimal and economically profitable production of animal products and the assessment of their environmental impact.
- Knowledge and application of legal, regulatory and administrative provisions in all areas of the veterinary profession and public health, understanding the ethical implications of health in a changing global context.
- Development of professional practice with respect for other health professionals, acquiring skills related to teamwork, efficient use of resources and quality management.
- Identification of emerging risks in all areas of the veterinary profession.

Graduates of the FVULE are ideally suited to work as veterinarians in the field of animal health, welfare and production, food safety and public health, in the private, public and business sectors. They can also continue their academic training in postgraduate programmes, both in the ULE itself and in other academic institutions in Spain and abroad.

This approach is in line with the recommendations of the World Organisation for Animal Health (OIE) regarding the minimum competencies (Day 1 Competencies) that a veterinary graduate should possess, the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG, 2015), and the standards of the European System for the Evaluation of Veterinary Education (ESEVT) in the Standard Operating Procedure Manual 2023 (EAEVE - FVE).

The FVULE has an effective quality assurance system in place to ensure the quality of its veterinary education. Details of this system are provided in the description of standard 1.4. In addition, the centre complies with the national guidelines established by the Agency for the Quality of the University System of Castilla y León (ACSUCYL), having obtained institutional accreditation in 2019.

Standard 1.2: The VEE must be part of a university or an institution of higher education that provides training recognised as being of an equivalent level and formally recognised as such in the respective country. The head of the Veterinary curriculum and the person(s) responsible for professional, ethical and academic matters of the Veterinary Teaching Hospital (VTH) should hold a veterinary degree. The decision-making, organisation and management process of the VEE must enable the implementation of its strategic plan and a cohesive curriculum, in accordance with the ESEVT Standards.

Details of the Faculty of Veterinary Medicine of the University of León

- Name of the Faculty: Faculty of Veterinary Medicine
- Address: Calle Profesor Pedro Cármenes, s/n. Campus Universitario de Vegazana, 24071 León (Spain)
- Telephone: +34 987 291 200
- E-mail addresses: fvedec@unileon.es fveadm@unileon.es
- Website: veterinaria.unileon.es
- Name of head of the Faculty: María Teresa Carbajo Rueda, DVM, PhD.
- Official authority supervising the Faculty: Professor Juan Francisco García Marín, DVM, PhD (Rector of the University of León).

Organisational chart (diagram) of the VEE with a brief description of the decision-making process

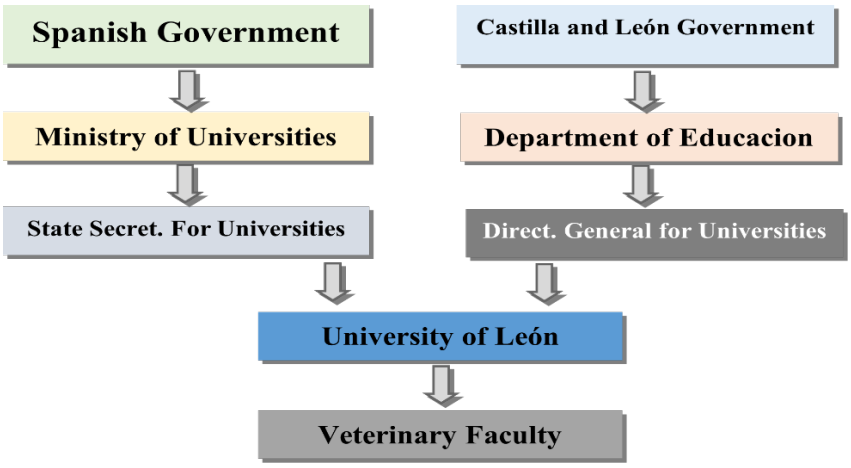


Figure 1.1. Administrative flowchart showing the place of the Veterinary Faculty within the hierarchy of the Spanish government and the Castilla y León Regional government.

The FVULE is part of the University of León, a public university dependent on the Ministry of Universities and the Ministry of Education of the Regional Government of Castilla y León. The ULE is composed of 13 Educational Centres and 26 Departments (unileon.es). The unipersonal governing bodies of the ULE are the Rectorate and the Vice Rectorates, and the collegiate bodies are the Governing Council and the Social Council.

The Statute of the University of León specifies the entities that have specific competences in the development of teaching and research activities. On the one hand, the Faculties and University Schools: are responsible for the organisation and supervision of teaching activities, while the Departments: are the bodies responsible for coordinating the teaching of their areas of knowledge in one or more Faculties or Schools in accordance with the teaching programme of the ULE, and for supporting the teaching and research activities and initiatives of the teaching staff.

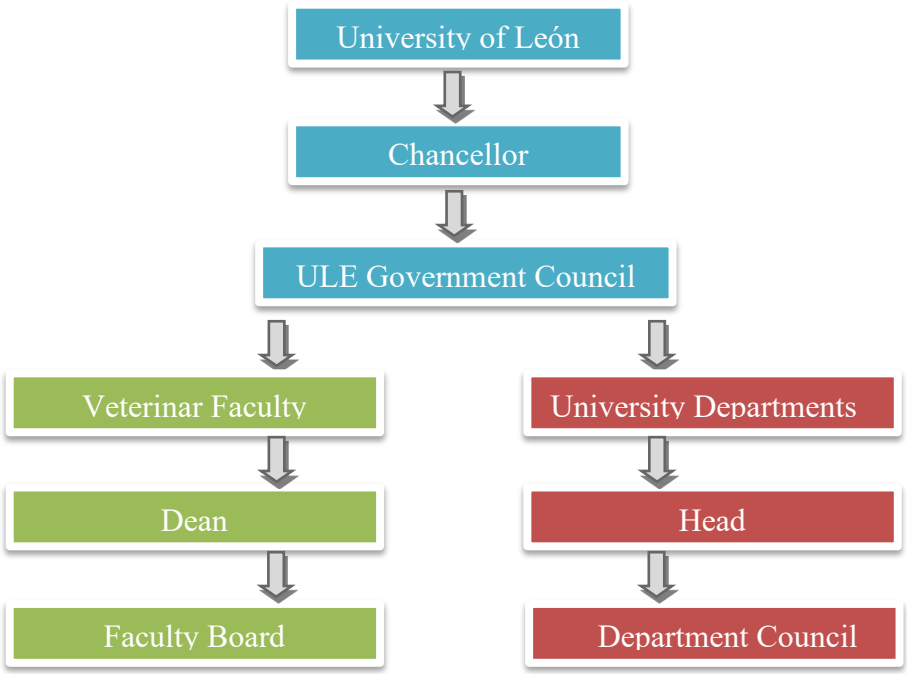


Figure 1.2. Organization of the Faculty of Veterinary and the Departments

Within the framework of the ULE, the FVULE is responsible for organising the teaching and other academic, administrative and management procedures leading to the award of the Degree in Veterinary Medicine and the Degree in Food Science and Technology. It also supervises the teaching and is responsible for quality assurance. The regulations governing the operation of the FVULE are set out in the Statute of the ULE (2003) and in the Internal Regulations of the FVULE (2020) (see Appendix 1).

The functions of the Faculty of Veterinary Medicine of León are set out in Article 5 of the Internal Regulations:

- Establish the specific teaching plan for each academic year and determine the organisation and distribution of all the resources allocated for the development of its activities.
- Coordinate the teaching programmes of their curricula.
- Coordinate and supervise the academic activity carried out by teachers within the respective curricula.
- Promote and coordinate the courses that may be established, apart from those that specifically fall within the competence of the departments.
- To provide material support to the departments for the implementation and completion of postgraduate studies.
- To carry out the complementary administrative management of the teaching activities organised by the Faculty.
- To promote and coordinate the development of academic, scientific and cultural activities aimed at improving the quality of teaching, as well as the preparation and professional qualification and the integral human training of its members.
- Contribute to the social use of the knowledge derived from the degrees it teaches.

The unipersonal governing bodies of the FVULE are the Dean, the Vice-Deans and the Academic Secretary. The Dean is the first authority of the Centre, as well as the ex officio president of the Faculty Board. The Vice-Deans direct and coordinate the activities of the Centre delegated to them by the Dean and substitute the latter in cases of absence or illness. The Secretary is the official secretary of the Faculty. As such, he/she takes and keeps the minutes of all kinds generated or deposited in the Centre and issues, under the supervision of the Dean, the corresponding certificates. In addition, there is an University official who is responsible for the administration of the Faculty.

These positions are currently held by:

- Dean: María Teresa Carbajo Rueda.
- Vice-Dean I: María José Ranilla García
- Vice-Dean II: José María Fresno Baro.
- Academic Secretary: José Gabriel Fernández Álvarez.
- Administration Manager: Marta Peláez Cañón.

The Faculty Board is made up of representatives of all groups in the Faculty (teachers, students and administrative and service staff) and carries out the functions of management and governance of the Centre, establishing the general lines of the academic policy and teaching plans of the Faculty, as well as the basic criteria for monitoring the preparation and training of students.

List of departments/units/clinics.

The Departments are the bodies in charge of coordinating the teaching of their Areas of Knowledge in accordance with the teaching programme of the University of León and are responsible for the teaching of the different subjects of the Syllabus. To this end, they are responsible for the following matters:

1. Programming and organisation of the teaching activity in accordance with the different areas of knowledge assigned to them.
2. Training of teaching and research staff through the positions of Assistant and Trainee.
3. Proposal to the competent bodies of the University for the provision of teaching and research staff to guarantee the quality of teaching and research, as well as administration and services staff.
4. Proposal to the competent governing bodies for the provision of sufficient material resources for the adequate performance of its activities.
5. Participate in the selection of its teaching and research staff.

There are five Departments at the Faculty of Veterinary Medicine.

- Department of Biomedical Sciences
- Department of Food Hygiene and Technology
- Department of Animal Health
- Department of Veterinary Medicine, Surgery and Anatomy
- Department of Animal Production.

In addition to these Departments, the Faculty is linked to three other Departments of the University of León, also located on the main Campus. These are: Molecular Biology (Biochemistry Section), Applied Chemistry and Physics and Biodiversity and Environmental Management. Basic information about the Departments can be consulted more extensively in the Appendix 2.

List of councils/boards/committees

The **Faculty Board (FBFVULE)**, with the aim of streamlining the operation of the Centre, and to develop tasks of different specialities, has the following Committees:

- **Executive Committee**: assists and advises the Dean on all matters within its remit and resolves any incident affecting the development of the Teaching Plan and academic activity in general. It is made up of 24 members, representatives of the FVULE's different departments.

- **Library Committee**: it is responsible for the acquisition of bibliographic material by the Faculty, within the limits of financial availability, and facilitates its consultation by the students and staff of the Faculty. It is made up of six members.
- **Course Councils** and **Teaching Committee**: the Course Councils are responsible for coordinating the teaching activities of the course and propose the timetables for teaching and assessment activities. In each course there is a Coordinating Professor who, together with the student delegates, the Secretary of the Faculty and the Dean or Vice-Dean, make up the Teaching Committee. The Teaching Committee is responsible for the organisation and coordination of teaching in the Faculty.
- In the Degree in Veterinary Medicine, a **Degree Coordinator** is appointed, who chairs the Committee whose main function is to control and monitor the Degree, also developing the Quality Assurance System, together with the Quality Committee of the FVULE. The Course Coordinators and student and PTGAS representatives form part of this Committee.
- **External Practices Committee (EPC)**: coordinates and supervises the External and In-Company Internships programmes, as well as the subject "Placement" of the Veterinary Studies Plan. It is made up of 11 members, including teachers, students and employer representatives.
- **Mobility Committee**: manages the national and international exchange of students, lecturers and administrative staff with other universities and higher education institutions.
- **Validation Technical Committee**: acts in the resolution of applications for the recognition of credits and subjects.
- **Quality Committee (QCFVULE)**: verifies and ensures compliance with the Faculty's Internal Quality Assurance System (IQAS). It formulates the annual quality objectives and monitors them through the indicators associated with the established processes. In addition to the Dean, the Quality Coordinator, the Degree Coordinators, Professors, students and support staff, external professionals linked to the veterinary profession participate.
- **Final Degree Project (FDP) Committee** manages matters relating to Final Degree Projects, particularly the assignment of work topics, tutors and assessment.

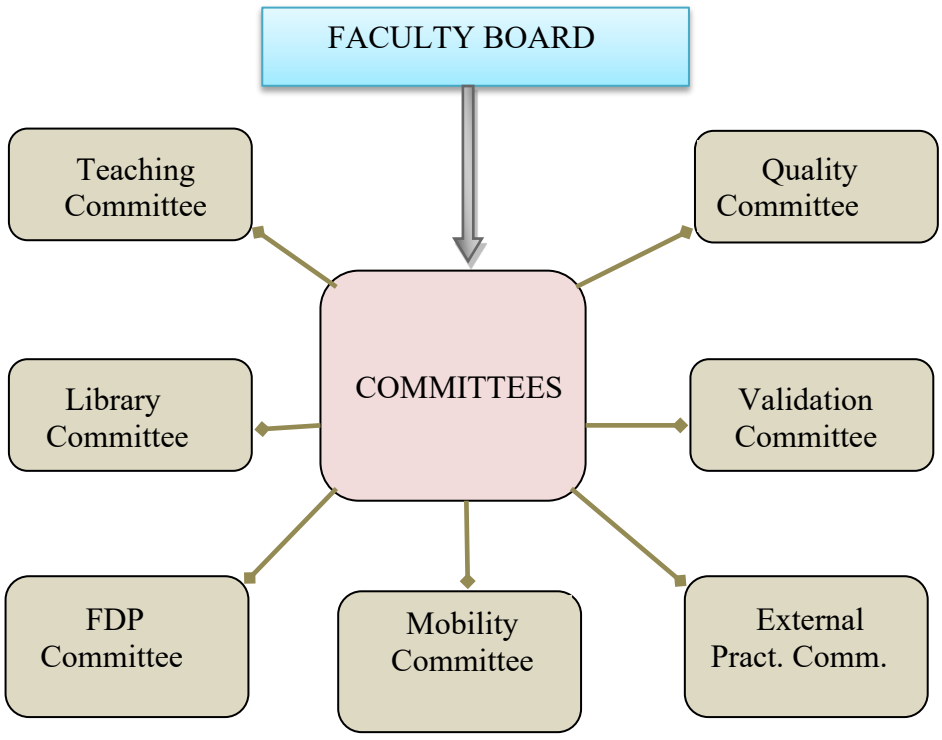


Figure 1.3. Organizational scheme of the Faculty Board and Committees

Description of formal collaborations with other EEVs

In the field of mobility, the FVULE has established collaborations with other Spanish, European and American Veterinary Faculties through the SICUE, ERASMUS and AMICUS programmes. Among others, we can highlight the Faculties of Berlin, Munich, Liège, Milan, Bologna, Padua, Turin, Lisbon, Mayor and Viña del Mar (Chile). More specific information can be found in the web page of the ULE International Relations Office.

Name and title of the person responsible of the VTH

Professor José Antonio Rodríguez-Altónaga Martínez, DVM, PhD, Department of Veterinary Medicine, Surgery and Anatomy.

The VHULE is a General University Service created to support teaching and research at the FVULE. Its main objective is the training of veterinary students, both undergraduate and postgraduate, offering a care service 365 days/year 24 hours/day. It is structured in two areas, large animals and small animals, each with different specialities. The assigned staff may be professors, contracted veterinary clinicians, scholarship holders and administration and services personnel. It is governed by the operating regulations which include a Board of Directors and an Academic Committee. The latter is in charge of coordinating the healthcare activity of the VHULE with the practical clinical activities included in the Teaching Plan of the Degree in Veterinary Medicine.

VHULE is further specified in standard 4.

Standard 1.3: The VEE must have a strategic plan, including a SWOT analysis of its current activities, short- and medium-term objectives, and an operational plan with a timeline and indicators for implementation. The development and implementation of the VEE strategy should include a role for students and other stakeholders, both internal and external, and the strategy should have a formal status and be publicly available.

Summary of the VEE strategic plan with an updated SWOT analysis.

In order to establish the objectives of the FVULE, the FVULE Strategic Plan 2015-2020 (SPFVULE2015-20) was drawn up in 2015. Once the timeframe of this plan had been completed, in 2020 it was necessary to take stock of the plan and address the development of a new Strategic Plan for the following years. The health emergency caused by the Covid-19 pandemic made it impossible to draw up the new Strategic Plan in order to react and deal with the new circumstances that had arisen. Thus, the SPFVULE2015-20 has been extended through a Strategic Plan 2022-2024 (SPFVULE2022-24) approved and revised in January 2023 with the participation of all FVULE stakeholders. (Appendix 3).

The ULE as an institution as a whole, began to develop its strategic lines in the academic year 2022-2023, specifying them in two phases so far: 2022-2023 (link) and 2023-2024 (link). In this sense, a high degree of alignment of the strategic lines of the ULE with the strategic axes of the FVULE is maintained.

In summary, the Strategic Plan includes the following sections:

STRENGTHS

- Reputation of the Veterinary Faculty of León as an institution with 170 years of tradition in higher education and scientific research.
- Student-based veterinary education developed in accordance with international veterinary education principles and standards.
- Optimal availability of adequate facilities for veterinary training.
- Consolidated teaching staff, with a high level of preparation, accredited by their years of work in the centre.

- Relations and cooperation with regional veterinary public services and public institutions and with associations in the veterinary field.
- Collaborations with scientists and professors from national and international institutions in different areas.

OPPORTUNITIES

- Relevance of the agri-food industry in the region of Castilla y León.
- The increasing development of the One-Health concept and its effective application at educational and professional level.
- Increased social awareness of animal welfare, and the recent enactment in Spain of the Animal Welfare Law.
- International networks for access to knowledge in today's globalised environment, with the aim of enhancing the mobility of students, teachers and researchers and disseminating knowledge.

WEAKNESSES

- Insufficient funding to support the high cost of veterinary education.
- Average age of teaching staff abnormally high.
- Lack of young faculty, which could seriously jeopardise the future of the Veterinary Faculty.
- Limited relationship and coordination between basic and pre-clinical departments and clinical departments.

THREATS

- Low capacity of the FVULE to make decisions on personnel and infrastructure, due to the centralised organisation of university services.
- Ageing of academic and support staff.
- ULE budget constraint and financial distribution criteria.
- The high number of Veterinary Faculties in Spain.

Summary of the VEE Operational Plan

The SPFVULE2022-24 Action Plan is organised into five strategic axes:

1. Teaching
2. Clinical and healthcare teaching activity
3. Research
4. Dissemination to society
5. Resources and infrastructure

Within these strategic axes there are included 14 strategic objectives, 29 strategies and 84 actions. Every strategy has a specified target audience and accountable personnel or team responsible for its implementation. There are also defined timeframes for commencing and concluding the project. Additionally, regular progress assessments and annual reporting of the findings are mandatory. Furthermore, key performance indicators must be established.

Standard 1.4: The VEE must have a policy and associated written procedures to ensure the quality and standards of its programmes and awards. It must also explicitly commit to developing a culture that recognises the importance of quality and quality assurance within the VEE. To achieve this, the VEE should develop and implement a strategy for continuous quality improvement. The VEE should have a policy of academic integrity, i.e. the expectation that all staff and students act with honesty, trust, fairness, respect and accountability.

Description of the overall VEE policy strategy for performance evaluation and QA

The FVULE has implemented an Internal Quality Assurance System (IQAS) that develops and consolidates the culture of quality based on a policy and objectives that are known and publicly accessible, as required by the European Higher Education Area. The IQAS of the FVULE was certified in the framework of the *Elenchos* Programme of the Agency for the Quality of the University

System of Castilla y León (ACSUCYL) (link). This agency belongs to the European Association for Quality Assurance in Higher Education (ENQA) (link), and is registered in the European Quality Assurance Register for Higher Education (EQAR), (link), which guarantees that the procedures and mechanisms contained in the Internal Quality Assurance System comply with the criteria and guidelines for Quality Assurance in the European Higher Education Area (ESG).

The IQAS is based on a coordinated system of -information gathering, -decision making, -implementation of quality improvement mechanisms and -verification of compliance with the objectives. This system has been developed at ULE since 2010 by the Quality and Evaluation Office (OEC) and updated in January 2022 (Appendix 4). Thus, it constitutes a fundamental pillar to provide support for the development of the IQAS, promoting evaluation and improvement processes in all areas of the institution.

The management structure of the IQAS of the FVULE is made up of the following elements:

- Dean's Team
- Quality Coordinator
- Quality Committee (QCFVULE)
- Faculty Board.

The Dean's Team designs the proposals for quality policy and objectives within the scope of IQAS, with the participation of the Centre's Quality Coordinator, which are discussed and approved by the FVULE Centre Board.

All the information related to the IQAS is transmitted to all the agents involved, including proposals for improving quality procedures and results. The planning and monitoring of the IQAS is carried out by the Quality Committee (QCFVULE), which also acts as a vehicle for internal communication within the system. Thus, the QCFVULE is in charge of collecting evidence on the way in which the students are studied, admission systems, teaching planning, mobility, student tutorial action plan, external placements, etc. It also collects information on the results and performance indicators of the Degrees and receives suggestions and indications of satisfaction from all internal and external stakeholders. Based on this information, the members of the Quality Committee, under the supervision of the Quality Coordinator, draw up an annual self-assessment report, which sets out a plan of proposals for improvement.

The FVULE website is the structural framework for all relevant information on quality assurance. Therefore, evaluation procedures and tools as well as self-assessment reports are published on the website. This ensures that all internal agents (teaching and research staff, administration and services staff, and students) and external agents (public administrations, companies, etc.) are informed about the implementation and development of the courses.

The self-assessment report produced each year allows the level of achievement of the objectives to be checked, proposes improvements based on suggestions from stakeholders and evaluation bodies. The proposals include an action plan, responsible party, timeframe and monitoring indicators, thus implicitly effecting a cyclical improvement process (Figure 1.4).

- Self-assessment report FVULE 2020-2021
- Self-assessment report FVULE 2021-2022

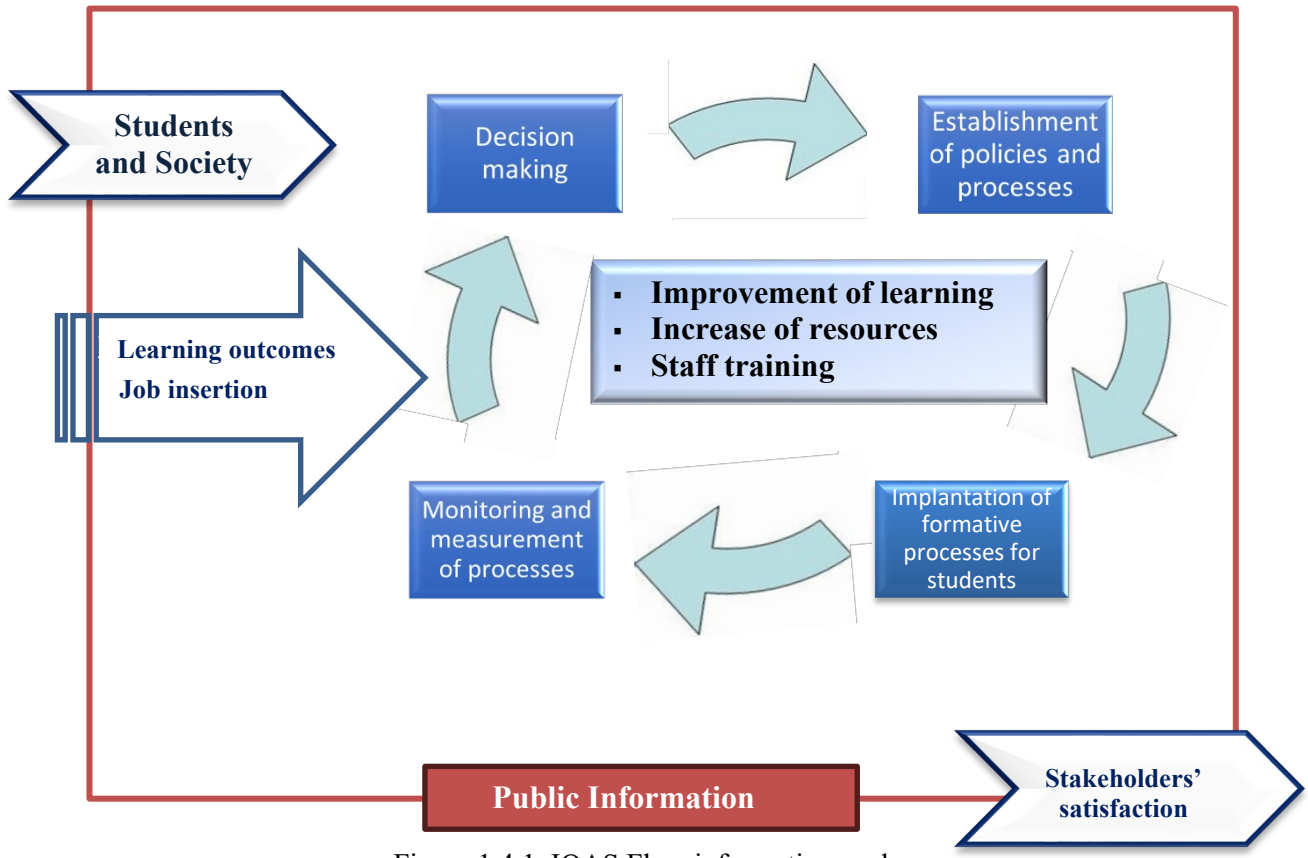


Figure 1.4.1. IQAS Flow information cycle

Standard 1.5: The VEE should provide evidence that it interacts with its stakeholders and society at large. Such public information should be clear, objective and easily accessible; the information should include up-to-date information on the curriculum, alumni views and employment destinations, as well as the profile of the current student population.
The VEE's website should mention the VEE's ESEVT status and its latest Self-Assessment Report and Inspection Reports should be readily available to the public.

Description of how the VEE informs stakeholders and the public
How to access the ESEVT status and reports of the VEE on the VEE website

The FVULE maintains relations with all stakeholders, external actors and society. In the first instance, communication takes place privately with the people involved, through frequent meetings, to exchange information of interest. In some cases, these meetings are aimed at establishing collaboration agreements, so that the FVULE currently has more than 300 agreements in place with different institutions, companies, professional associations and groups.

The relationship between the FVULE and the General Council of the Official Veterinary Associations of Castilla y León, (made up of 9 provinces) is very fluid, with the aim of knowing the needs for improvement and adaptation of the training programmes to the reality of the veterinary sector. In this sense, it is necessary to highlight that in 2018 the "Veterinary Forum of Castilla y León" has been constituted, in which the General Council of Veterinary Associations of Castilla y León, the Trade Union of Veterinarians of Castilla y León and the Faculty of Veterinary Medicine of León participate.

The OEC of the ULE carries out satisfaction surveys of students, teaching staff, non-teaching staff and employers, and monitors the whole cycle of a student at the university from enrolment to graduation and subsequent working life.

On the other hand, at the global level of the University, the Social Council of the ULE is the body for the participation of society in the government and administration of the University. Its basic competence is the evaluation of the functioning of the University from the perspective of society.

How to access the ESEVT status and reports of the VEE on the VEE website

There is a specific section on the FVULE website with information on its status within ESEVT, the Faculty's self-reports, and the reports of the visits and reviews carried out by the EAEVE Evaluation Committees, at the link https://veterinaria.unileon.es/evaluacion-europea/

Standard 1.6: The VEE should regularly monitor and review its activities, both quantitative and qualitative, to ensure that they achieve their stated objectives and respond to the needs of learners and society. The VEE should publicise how this data analysis has been used in the further development of its activities and provide evidence of student and staff involvement in the provision, analysis and implementation of such data. Evidence should be provided that quality assurance cycles are fully closed (Plan-Realise-Review-Adjust cycles) in order to efficiently improve the quality of education.
Any action planned or taken as a result of this data analysis should be communicated to all stakeholders.

The collection of relevant information for monitoring and reviewing the activities of the FVULE is carried out by means of the evaluation questionnaires of the teaching activities that are completed anonymously at the end of each semester. The questionnaire is a tool designed to obtain the opinions of students, teachers, administrative and service staff, graduates and employers in order to improve teaching. It consists of questionnaires with multiple sections, which make it possible to evaluate various aspects (organisation, teaching activities, infrastructures, student interest and satisfaction, etc.). As the questionnaire is an important tool in IQAS, efforts are made to make students aware of the importance of participating in this process. This information is first assessed by the dean's team, then by the FVULE quality coordinator, and subsequently by the Quality Committee. In this instance, the main problems of major importance must be identified, and the means for their resolution, which must be verifiable. In this way, the self-monitoring reports of the degree are drawn up annually, which, once proposed by the QCFVEULE, are approved by the Faculty Board.

The procedures of the internal quality assurance system are reviewed at least every three years, so that the quality coordinator must submit a review report to the Quality Committee, including strengths, weaknesses and proposals for improvement. Subsequently, once approved by the QCFVEULE, the procedure is proposed for modification to the Faculty Board.

The aggregated official results of the student assessment are available online at the following link on the OEC website (https: //lookerstudio.google.com/s/sRnPLovGG2c)

Standard 1.7: The VEE must be subject to external review through ESEVT on a cyclical basis. Such external evaluation should be credited with assurance that progress since the last ESEVT evaluation was linked to a continuous quality assurance process.

Date of last ESEVT inspection and description of how deficiencies have been corrected and how this has been used for quality improvement.

The last evaluation of the faculty was in March 2017. Prior to that date, and especially since then, the internal quality assurance system has been significantly implemented, with a number of noteworthy examples.

Based on the 2015-2020 strategic plan, the foundations were established to clearly set the objectives and propose the necessary actions to maintain and increase the quality of the teaching of

veterinary graduates at the FVEULE. Thus, the faculty's quality assurance procedure was submitted for certification by the quality agency of Castilla y León and approved in 2019. The deployment of the quality assurance system has made it possible to maintain and increase optimal quality standards in recent years.

Likewise, the 2015 2020 strategic plan established the need to strengthen the activities of the Veterinary Hospital in all areas. We must especially highlight the approach of an economic and marketing strategy to increase the hospital's business capabilities, which has had a very positive impact on its activity, by obtaining financial resources, increasing staff recruitment, etc., and therefore on the clinical training of the faculty's students.

Comments on Area 1

In order to assess the different sections included in this area 1 of the self evaluation report, several factors that have influenced the FVULE's activity to date, and will certainly do so in the coming years, must be taken into account. The following is a list of the main elements that condition the development of the content of area 1.

- The consequences of the COVID-19 pandemic, which forced the urgent adoption of contingency measures from the second semester of the 2019-2020 academic year, and whose effects were maintained during the following two academic years (2020-2021 and 2021-2022).
- The entry into force of the new Organic Law on Universities (LOSU) in Spain in April 2023, the progressive implementation of which will modify several aspects of that included in the standards in this area, as well as in most of the other areas developed in this self-report.
- The regulatory development of the new "Law for the protection of the rights and welfare of animals", which was approved in Spain in September 2023, and which brings together new obligations and prohibitions to guarantee the rights of both domestic and non-domestic animals.

Other aspects that we believe to be relevant within area 1 are:

- FVULE's reduced capacity to make decisions on staffing and infrastructure.
- The ageing of academic and support staff.
- The ULE budget constraint and the financial distribution criteria that are regularly established.
- The high number of Veterinary Faculties in Spain (there are currently 15).

Suggestions for improvement in Area 1

In relation to the previous comments, some of the suggestions for improvement in the different standards in Area 1 would be the following.

- To achieve an optimal implementation of the SPFVULE, with greater involvement of all stakeholders (staff, students, interest groups).
- Encourage the involvement of stakeholders in the design, organisation, review and modification of the FVULE's teaching and research activities.
- Promote the increase in the number of credits of the Degree, in order to increase the number of clinical internships and the offer of optional subjects.
- To achieve greater independence and financial autonomy for the FVULE.
- To obtain the sponsorship of companies related to the veterinary, food and pharmaceutical sectors, etc., which will allow the development of a greater number of training activities at the FVULE.
- Increase the financial endowment of the FVULE, taking into account the peculiarities of the Faculty of Veterinary Medicine.
- Request more teaching posts, especially for young graduates.
- Stabilise the current teaching and support staff.
- To achieve adequate recognition of the dedication of the teaching staff linked to the hospital.
- Propose new specialised training courses or diplomas.

- Support and contribute to the Sustainable Development Goals in teaching, research, management policies and social leadership at ULE and particularly at the FVULE.

AREA 2. FINANCES

AREA 2. FINANCES

Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the VEE 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 VEE

Finances of Spanish Public Universities are ruled by Organic Laws 6/2001 and 4/2007, which state that Public Universities have economic and financial autonomy under the established terms. They also stipulate that Universities must have sufficient resources for a basic quality operation. Since the competences in education were transferred to the Regional Governments, they provide the Universities with the financial resources to support their superior educative level and promote their full participation in the European Higher Education Area. Finally, each University is granted autonomy to develop, approve and manage its budget and administrate its resources (article 217 of the statute of the ULE, (link). The ULE's budget is sanctioned both by the ULE Board and the Social Council of the ULE, being public (link) and annual (from 1st January to 31st December). The main sources of income for the ULE during 2023 are shown in Table 2.1.1.

The budget of the ULE is annual, based on the calendar year (from 1 January to 31 December) and not on the academic year (from 1 September to 31 August). Initial approval (project phase) is granted by the ULE Governing Council, which then submits it for final approval to the ULE Social Council.

As shown in Table 2.1.1, apart from the funds the ULE receives from the Regional Government, other sources of income include student fees, which are managed by the ULE Central Services but not by the FVULE. Tuition fees only contribute to 14,87 % of the total income. The cost of each credit is fixed annually by the Regional Government (*Decreto* 7/2023, de 18 de mayo (BOCYL N.º 96 de 22-05-2023; link) and depends on the experimental component and the number of times a student has previously enrolled in a course (Table 2.1.2.). The Degree in Veterinary Medicine has the maximum experimental rating (level 1).

Table 2.1.1. Sources of income for the ULE (2023)

CONCEPTS	AMOUNT (€)	%
Tuition fees, public fees and other income	19,091,500	14.87
Ordinary transfers (Regional Government, private entities, …)	75,745,730	59.01
Capital transfers	11,692,475	9.11
Financial liabilities	-------	-----
ULE's income (approximately)	128,352,692	

In addition, in income there are Financial Assets amounting to € 21,517,987 and Capital Income amounting to € 305,000, which represent 16.76% and 0.24%, respectively, of the total income of the University of León in 2023.

Table 2.1.2. Tuition fees in Euros per ECTS and number of enrollments

ENROLLMENT	1st	2nd	3rd	4th and subsequent
Price (€/ECTS)	20.38	45.38	98.32	136.14

Additionally, the main sources of income for the FVULE in 2023 are shown in Table 2.1.3.

Table 2.1.3. Sources of income for the FVULE (2023)

CONCEPTS	AMOUNT (€)	%
Tuition fees, public fees and other income	1,165,290	8.42
Ordinary transfers (Regional Government, private entities…)	10,289,721	74.31
Capital transfers	2,391,028	17.27
Financial liabilities	-------	-----
FVULE's income	13,846,039	

Based on these principles, all entities, whether Faculties, Departments or Services, are governed by the same general financial system. This means that the ULE (*Gerencia*) manages the payment of all major expenses related to staff salaries, maintenance costs, which include electricity and water supplies, cleaning, basic maintenance, air conditioning, lifts, fire extinguishers, gardening and rubbish collection services and work outsourced to external companies. The Faculty of Veterinary (FVULE) and the Veterinary Teaching Hospital (VHULE) only manage the budget for running costs, equipment and some maintenance costs. The VHULE covers the personnel costs of the veterinary specialists, trainees and residents.

Regarding expenses, staff salaries are the area with the highest figures. Table 2.1.4. displays the expenditures on staff at FVULE, VHULE, and the Ambulatory Clinic, depending on their activity. Over the last 3 academic years, there has been an increase due to the incorporation of new staff and the corresponding salary increases applied by the Government of Spain.

Table 2.1.4. Annual expenditures for the last three academic years (in euros)

	2023 (€)	2022 (€)	2021 (€)	Mean (€)
1. Academic staff	9,983,241.49	7,501,407.92	7,044,937.07	8,176,528.83
1.1 FVULE	9,322,489.59	7,146,760.25	6,703,034.66	7,724,094.84
1.2. VHULE	607,511.90	311,087.67	300,762.41	406,453.99
1.3. Amb. Clinic	53,240.00	43,560.00	41,140.00	45,980.00
2. Support Staff	2,360,680.32	1,700,722.08	1,552,491.18	1,871,297.86
2.1. FVULE	2,198,792.22	1,571,920.83	1,456,756.59	1,742,489.88
2.2. VHULE	161,888.10	128,801.25	95,734.59	128,807.98
3. Researchers	1,656,558.81	946,143.57	908,872.99	1,170,525.12
3.1. FVULE	1,656,558.81	946,143.57	908,872.99	1,170,525.12
Staff expenses	14,000,480.62	10,148,273.57	9,506,301.24	11,218,35.81
FVULE + Amb. Clin.	13,231,080.62	9,708,384.65	9,109,804.24	10,683,089.84
VHULE	769,400.00	439,888.92	396,497.00	535,261.97

Financial resources for teaching consumables and small laboratory equipment are directly managed by the ULE's Departments involved in the Degree in Veterinary Sciences and are assigned based on the number of courses, taught credits, enrolments, students per group, etc. (Table 2.1.5.). These departments are present in more than one centre, not only in the Faculty of Veterinary Medicine.

The expenses of the library are covered by the Central Services of the ULE.

Maintenance and supply expenses have substantially increased over the last three years (Table 2.1.6.), thus allowing the improvement of several facilities of the FVULE (Tables 2.1.7., 2.1.8., 2.1.9., and 2.1.10.).

With regard to expenditure on electricity, gas and water supplies, there is a slight increase each year (Table 2.1.6.), which is necessary to meet teaching needs, as well as for the maintenance and renewal of computer and audiovisual equipment.

In terms of FVULE income, the effort made by the ULE is noteworthy, as investment in the FVULE has increased by more than one million euros over the last three years (Table 2.1.11.).

Table 2.1.5. Annual budget allocation for teaching material during the last three academic years

DEAN'S OFFICE	2023 (€)	2022 (€)	2021 (€)	Mean (€)
	45,587.25	42,752.91	43,654.76	43,998.31
DEPARTMENTS				
Animal Health	20,824.51	19,116.19	19,532.86	19,824.52
Animal Production	16,449.22	16,038.05	15,854.09	16,113.79
Applied chemistry and physics	5,840.97	5,620.95	5,637.01	5,699.64
Biodiversity and environmental management	4,018.94	3,802.22	3,887.17	3,902.78
Biomedical Sciences	36,785.65	33,441.50	31,895.04	34,040.73
Food hygiene and technology	18,340.28	17,142.95	18,136.63	17,873.29
Molecular Biology	5,362.87	5,022.07	4,776.27	5,053.74
Modern philology	2,428.54	2,300.39	2,392.84	2,373.92
Veterinary Medicine, Surgery and Anatomy	25,249.02	23,557.48	19,027.92	22,611.47

Table 2.1.6. Annual expenditures in maintenance and supplies during the last 3 academic years

CONCEPT / YEAR	2023* (€)	2022 (€)	2021(€)	MEAN (€)
FVULE				
1.- Maintenance in buildings and other facilities	2,500.00	6,126.34	52,178.52	20,268.29
2.- Electricity, gas, water and telephone	332,495.00	290,513.24	229,144.92	284,051.05
Total	**334,995.00**	**296,639.58**	**281,322.44**	**304,319.34**
VHULE				
1.- Maintenance in buildings and other facilities by ULE	156,700.00	228,445.69	125,626.28	170,257.32
2.- Electricity, gas, water and telephone by ULE	322,000.00	105,349.45	78,028.41	168,459.29
Total	**478,700.00**	**333,795.14**	**203,654.69**	**338,716.61**
TOTAL	**813,695.00**	**630,434.72**	**484,978.13**	**643,035.95**

**The year 2023 is not yet closed, so these are estimated data.*

Table 2.1.7. Improvements in FVULE during the last 3 academic years

2023	PROVISION OF FURNITURE FOR ALL THE NEW SPACES IN THE NORTH AND SOUTH WINGS OF THE FACULTY
	PAINTING OF A PROFESSOR'S OFFICE: Department of Animal Production
	LOUNGE: Video conference systems
	NEW COMPUTER ROOM: Computer system
	REFURBISHMENT OF THE KENNEL LOCATED IN THE FACULTY BUILDING: Restoration of the walls and replacement of windows
	MASONRY WORKS IN THE CELLULAR CULTURE ROOM (Room 352) of the Anatomy Area within the Department of Veterinary Medicine, Surgery and Anatomy: The installation of a CO_2 Detector Probe The Securing a Nitrogen Cylinder
	MASONRY WORKS in the Parasitology area within the Department Animal Health: The enlargement of a door The division of a laboratory using a plasterboard panel
	MASONRY WORKS in the Infectious Diseases area within the Department Animal Health: The removal of an extraction hood, involving the cancellation of gas pipes and drains

2022	REMODELLING OF THE NORTH AND SOUTH WINGS OF THE FACULTY BUILDING: Allocation of spaces into 7 professor's office, 5 new classrooms, 1 computer suite, 1 lecture hall, 1 tutorial room, 1 relaxation area, 1 toilet, 1 changing room with locker facilities, 3 new practical laboratories, 4 group study rooms, 1 room for the student council, 2 storage rooms, and 1 room for the FVULE's historical archive
	NEW CLASSROOMS (5): Video conference systems
	PAINTING OF A PROFESSOR'S OFFICE: Department of Animal Production
	MASONRY WORKS IN THE CELLULAR CULTURE ROOM (Room 352) of the Anatomy Area within the Department of Veterinary Medicine, Surgery and Anatomy: Installation of air conditioning
	ADAPTATION OF A FACILITY within the Department of Food Hygiene and Technology for use as professor's offices.
2021	CLASSROOMS (8): Video conference systems

Table 2.1.8. Improvements at the VHULE over the last 3 academic years

2023	COMPREHENSIVE RENOVATIONS OF THE LARGE ANIMAL AREA
	CONSTRUCTION OF A SWINE AREA: Cardiology Research
2022	COMPREHENSIVE RENOVATIONS OF THE SMALL ANIMAL AREA: The preoperative rooms and surgery room Replacement of operating theater lighting
2021	COMPREHENSIVE RENOVATIONS OF THE SMALL ANIMAL AREA: The consultation rooms, the laboratories, the X-Ray room

Table 2.1.9. Works and improvements at the TFULE over the last 3 academic years

2023	OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT: Adaptation of the cows and ewes facilities and of the milking parlours for improved welfare
2022	OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT: Adaptation of the swine facilities for improved welfare
2021	OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT: Adaptation of the perimeter fencing

Table 2.1.10. Works and improvements at the FPP over the last 3 academic years

2022	REMOVAL OF CONSTRUCTION CAMERAS

Annual tuition fee for national and international students

The annual cost of training a student is calculated by the total cost of the Veterinary degree as set out in Table 2.1.11., divided by the number of students enrolled in the Veterinary degree each year. There has been an increase in costs per student over the recent academic years.

Table 2.1.11. Expenditure of the Veterinary degree per student (without considering mobility students)

	ENROLLED STUDENTS	GRADUATED STUDENTS	EXPENDITURE (€) STUDENT/YEAR	EXPENDITURE (€) STUDENTE/DEGREE
2022/2023	615	103	26,669.15	**159,238.10**
2021/2022	617	99	20,244.06	**126,167.52**
2020/2021	618	93	17,411.21	**115,700.27**
Mean	**617**	**98**	**21,441.47**	**133,701.96**

The annual economic balance for each academic year is zero, since the total amount of money received is spent, generating neither positive nor negative balance. The annual funds are received from the Rector's Office, which come directly from the Regional Government and are invested in works for the buildings and improvement jobs and managed through the ULE.

Table 2.1.12. Annual expenditures for the last three academic years (in euros)

	2023 (€)	2022 (€)	2021 (€)	MEAN (€)	%
FVULE					
Teaching and non-teach. staff	13,231,080.62	9,708,384.65	9,109,804.24	**10,683,089.84**	91.26
Expenditures in Facility Investments/ Improvements	164,875.85	866,948.12	31,135.75	**354,319.91**	3.03
Regular Expenditures Faculty Activity	115,087.25	97,750.91	96,894.76	**103,244.31**	0.88
Equipment, maintenance and supplies by ULE	472,000.00	165,854.02	144,466.61	**260,773.54**	2.23
FVULE equipment, maintenance and supplies	334,995.00	296,639.58	281,322.94	**304,319.17**	2.60
TOTAL FVULE expenses	**14,318,038.72**	**11,135,397.28**	**9,663,624.30**	**11,705,746.77**	
VHULE					
Teaching and non-teach. staff	769,400.00	439,888.92	396,497.00	**535,261.97**	35.41
Equipment, maintenance and supplies by ULE	478,700.00	333,795.14	203,654.69	**338,716.91**	22.41
VHULE – Clinical Activity / Other expenditures	835,385.56	581,323.53	496,348.73	**637,685.94**	42.18
TOTAL VHULE expenses	**2,083,485.56**	**1,355,007.59**	**1,096,500.42**	**1,511,664.52**	

**The year 2023 is not yet closed, so these are estimated data.*

Another source of funding comes from research projects managed by the FVULE research groups (Table 2.1.13.). It is worth noting the importance of research in this FVULE, where this funding has been steadily increasing.

Table 2.1.13. Annual revenue from research projects managed by research groups of the FVULE over the last 3 academic years (in euros)

YEAR	2023 (€)	2022 (€)	2021 (€)	MEAN (€)
Contracts, article 83 LOU (Universities Organic Law)	303,211.12	485,686.93	521,809.05	436,902.36
Projects and grants from National Plan	1,642,254.00	1,181,498.00	676,392.00	1,166,714.67
Projects and grants from Regional Plan	111,323.50	260,000.00	282,795.00	218,039.50
International projects and grants	334,238.95	295,221.23	260,303.46	296,587,88
TOTAL	**2,391,027.57**	**2,222,406.16**	**1,741,299.51**	**2,118,244.41**

Standard 2.2: Clinical and field services must function as instructional resources. The instructional integrity of these resources must take priority over the financial self-sufficiency of clinical services operations.
The VEE must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.

Like the FVULE, the main objective of the TFULE and the VHULE is to train students.

The Faculty does not have the capacity to generate additional income, the University being the only entity with the capacity to do so through the rental of its facilities, in particular classrooms for events, although this source of income is also centralised. Academic staff generally enjoy a degree of autonomy in activities such as research, extension courses and the organisation of symposia and conferences. The ULE guidelines allow the Faculty to promote these events, but do not provide any additional income. The FVULE respects these protocols.

The VHULE has the greatest degree of flexibility, as it can develop leasing agreements, aimed at professionals and companies interested in carrying out research activities, as well as for other purposes, pending approval by the VHULE Board of Trustees in accordance with the VH's commitment to excellence in teaching. The VHULE is part of the General University and Business Foundation (FGULEM), which is a private, non-profit educational foundation dedicated to the promotion of culture, education and scientific and technical research of the University of León, and its relations with society and the business world. The VHULE budget is managed by the FGULEM. Expenditure is divided into two concepts: costs related to clinical activity and personnel costs. The facility pays the costs related to utilities (electricity, water consumption, heating, cleaning and maintenance) (Table 2.2.1). Revenues come from clinical activity (the VHULE is partly self-financing in terms of clinical, diagnostic and other services, increasing its annual budget) and from the funding the Foundation receives from both public and private entities. Although the VHULE charges market rates for its clinical and field services, to avoid unfair competition, these services are offered at lower prices to ULE staff and non-profit organisations such as animal shelters to ensure a sufficient number of clinical cases for training.

Expenditure and income have increased over the last three years, generating a positive balance that will translate into improved equipment and resources for the VHULE.

The increase in the number of cases and overall activity of the Veterinary Hospital over these last few years has led to two factors that are a consequence of this increase: increase in operating costs, which are reflected in the 'clinical activity' section and increases in personnel costs ("Veterinary Staff – Support Staff").

To generate more activity, a greater application of resources, both human and material, is necessary. However, in personnel management, the implementation of the new labour regulations during the year 2023, as a result of the labour reform published in December 2021, has been decisive. This labour reform has required the transformation of trainee interns (Veterinary Internal Residents - VIR-) managed by the University and part of its budget, into training and apprenticeship contracts, which are now managed by the Veterinary Hospital and, consequently, are part of its current budget.

This situation leads to an increase in the Veterinary Hospital's negative surplus, which will be recorded as personnel expenses in the Veterinary Hospital's Management and Administration Report, complying with the Management Assignment formalising the economic administration of the Veterinary Hospital.

This increase in activity mentioned in the expenses section also results in an increase in income, although it does not occur in the same proportion as expenses, mainly due to the burden currently borne by the Veterinary Hospital as a result of the transformation of the VIR into employment contracts.

Table 2.2.1. Annual balance of the VHULE over the last three academic years (in euros)

	2023 (€)	2022 (€)	2021 (€)	MEAN (€)
EXPENDITURE				
Clinical activity	795,385.56	538,661.53	496,348.73	610,131.94
Veterinary staff	607,511.90	311,087.67	300,762.41	406,453.99
Support staff	161,888.10	128,801.25	95,734.59	128,807.98
Outstanding Revenues	40,000.00	42,662.00	-	27,554.00
Equipment, maintenance and supplies by ULE	478,700.00	333,795.14	203,654.69	338,716.61
TOTAL	**2,083,485.56**	**1,355,007.59**	**1,096,500.42**	**1,511,664.52**
REVENUE				
Clinical activity	1,102,896.00	843,151.99	748,160.89	898,069.63
Agreements with companies, Funding, Grants, Donations	30,000.00	12,206.44	3,322.31	15,176.25
Allocation from ULE	950,589.56	499,649.16	345,017.22	598,418.65
TOTAL	**2,083,485.56**	**1,355,007.59**	**1,096,500.42**	**1,511,664.52**
FINAL BALANCE	-	-	-	-

Although the farm teaching is a service of the ULE (TFULE), its management is contracted to the company Evolution Ibérica XY S.L. The sale of animals and invoices are managed by the ULE. Its income comes from the ULE and from the sale of animals and their productions (table 2.2.2), and

from a small income corresponding to a Common Agricultural Policy income, which also contributes to the farm's budget.

Table 2.2.2. Annual balance of the TFULE over the last three academic years (in euros)

	2023 (€)	2022 (€)	2021 (€)	MEAN (€)
EXPENDITURE				
Food expenses	372,249.25	224,284.97	243,437.88	**279,990.70**
Maintenance	13,458.25	46,528.01	49,877.11	**36,621.12**
Medicines and vaccinations	10,547.07	732.81	21,815.15	**11,031.68**
Other	250,286.63	218,328.20	196,394.85	**221,669.89**
TOTAL	**646,541.20**	**489,873.99**	**511,524.99**	**549,313.39**
REVENUE				
Allocation from ULE	410,019.04	269,988.04	375,113.28	**338,373.45**
Sale of animals and productions	236,522.16	219,885.95	176,411.71	**210,939.94**
Subsidies	9,194.73	13,389.05	10,628.23	**11,070.67**
TOTAL	**655,753.93**	**503,263.04**	**522,153.22**	**560,384.06**
FINAL BALANCE	**9,194.73**	**13,389.05**	**10,628.23**	**11,070.67**

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

The repair, maintenance and purchase of TFULE infrastructures are coordinated and managed together with the Office of the Rector. The TFULE submits a maintenance request to the ULE at the beginning of each year. Prior to this, the Office of the Rector consults the Faculty on the needs for improvement. Subsequently, the Economy and Infrastructure Committee is convened, and the final request is approved. The Office of the Rector decides which actions are carried out according to the prioritization and conditions established by the Regional Government and the budget allocation. With this procedure, all the actions indicated in Tables 2.1.6 to 2.1.9 have been carried out over the last 3 years.

In 2021 and 2022 the ULE prioritised the VHULE and the FVULE and, on the other hand, in 2023 the TFULE, making progress in updating some infrastructures (see Tables 2.1.7 to 2.1.10). The ULE management prepares the annual budget and financial report for the FVULE, the Departments teaching at the FVULE and the TFULE, those of the VHULE are prepared by the FGULEM. Requests for any expenditure exceeding the regular budget must be submitted annually, as extraordinary expenditure, to the Office of the Rector for approval. The Office of the Rector decides which infrastructure projects are carried out, after evaluating all requests from the faculties, according to budget availability.

Comments on Standard 2

The general funding process of the FVULE is legally established and has positive aspects such as centralised payment of salaries, general maintenance, and operational costs. Moreover, the VHULE, the TFULE, and the Departments manage their own budgets, meaning that the FVULE controls a very limited budget which restricts its maneuverability in many cases.

The ULE is responsive to the exceptional needs of the FVULE, stemming from its large and unique infrastructure, which includes the Food Pilot Plant (FPP-FVULE). However, it is not always fully considered that the cost of a student in the Veterinary Sciences degree is significantly higher than in other degrees, and budget distribution seldom reflects this. Although the educational objectives of the Veterinary Sciences degree are met with the current budget, we have identified a need for budgetary improvements to meet any emerging needs within the degree. It would be crucial for the FVULE to take on a more significant role in financial management.

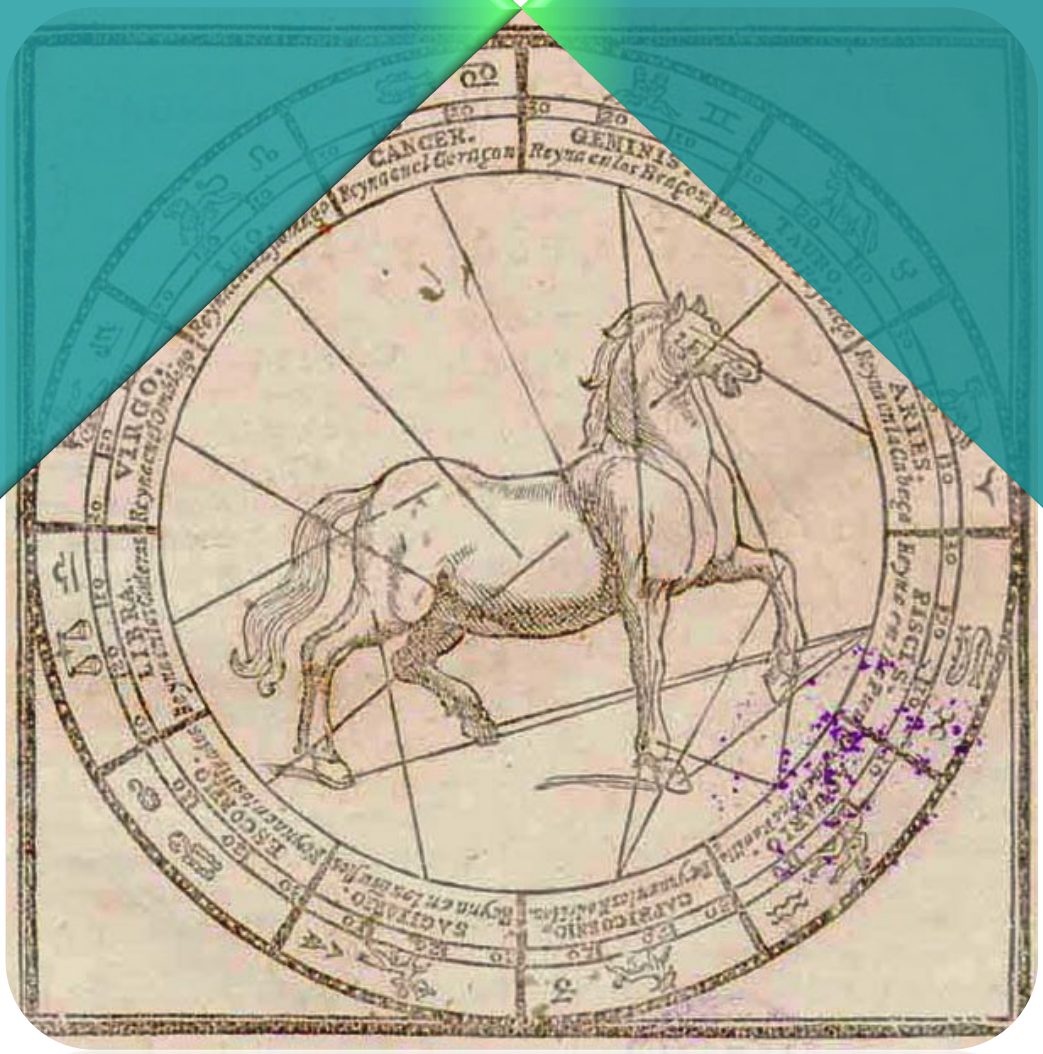
The FVULE lacks financial autonomy for the acquisition of medium or large equipment. Furthermore, there is no specific budget allocation for them, and the departments also have a restricted budget. Investment in medium and large equipment requires specific funding from the University or external funding through competition for a national or regional government grant for scientific infrastructure and/or research projects. Investments in infrastructure (buildings, facilities, refurbishments) are managed at the ULE level. The FVULE submits requests throughout the year for the main building maintenance works to the Vice-Rectorate for Infrastructure and Maintenance.

Suggestions for improvement on Standard 2

Given that ULE relies heavily on public funding and is therefore subject to the Contractual Programme signed with the Regional Government, the possibilities for major changes are limited. That said, our main suggestions are:

- Reduce the energy expenditure in the facilities by adopting measures that reduce electricity and gas bills, such as the installation of solar panels.
- Increase the budget for maintenance and improvement of the facilities of the Establishment, as the needs sometimes exceed the financial availability we have.
- The budget dedicated to the Departments for Teaching should be increased to acquire updated equipment in order to be more competitive for practical teaching.
- Investment in manikins for the acquisition of clinical skills is extremely important. A plan for their acquisition should be established.

AREA 3. CURRICULUM



AREA 3. CURRICULUM

Standard 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 the ESEVT SOP 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), Veterinary Public Health (including Food Safety and Quality), Professional Knowledge.

Description of the educational aims of the VEE and the general strategy for the design, resources and management of the curriculum

The current curriculum is an adaptation of the regulatory framework replacing the previous degree and has been gradually introduced since 2010. Courses syllabuses are organised as per Directive 36/2005/EU and Law 44/2003 (BOE 22nd November 2003).

The curriculum involves 300 ECTS credits (link). It is organized around abilities isolated into four classifications: basic competences (5) -formulated by the University of León, transversal or generic competences (11), and specific competences (85). A total rundown of these skills can be consulted at the accompanying link (see pages 12 to 19).

The integrated design of the teaching plan requires extensive coordination and constant management and supervision by the ACSUCYL and explicitly by the FVULE (Teaching Committee and Quality Committee). To improve coordination, all teaching activities must be scheduled through the centre's teaching management, and no unannounced activities are allowed.

Every year, around May, the Departments approve the teaching guides and plans for the following academic year. All of this is reported by the QCFVULE' and Teaching Committee and presented for approval at the Faculty Board. A detailed description of this process can be found in area 2 of the SER and appendix 4.

With regard to the entire organisation of the degree, the class timetables are drawn up by the Dean's team for all the subjects in the syllabus, supervised and approved by the Course Councils (made up of the degree coordinator, the lecturers responsible for the subjects and the student representatives), ratified by the Quality Committee and the Teaching Committee of the FVULE and finally by the Faculty Board.

Each academic year, all training activities from the 1st to the 5th year of the Degree in Veterinary are scheduled in a calendar (link) in which the student is assigned to a specific module of practices. The class schedules for all subjects in the curriculum are prepared by the Dean's team, supervised and approved by the Course Councils (made up of the course coordinator, the professors responsible for the subjects and the student representatives, ratified by the Quality Committee and the Teaching Committee of the FVULE and, finally, by the Faculty Board. This coordination task is carried out from March to May, with the participation of teachers and students, also fixing the schedule of final exams. Like the Teaching Guides (TG), the schedules are published on the Faculty website before the registration period. Once published, corrections or readjustments are only accepted if they are duly justified and do not involve any irregularity in the schedule as a whole.

A teaching plan of 300 ECTS credits has been devised, divided into modules (Table 3.1.1). Each module is made up of different subjects (link), taught over a semester (a four-month subject). The Tutored Practical Trainings (TPT) and the Final Degree Project (FDP) are offered in the final semester (semester 10). The learning strategy combines different training activities as shown in Table 3.1.2.

Table 3.1.1. Modules of the FVULE curriculum

Common Basic Training (Basic Veterinary Sciences)	102
Clinical Sciences and Animal Health	105
Animal Production	33
Food Hygiene, Technology and Safety	24
Tutorized Practical Training (including VH rotation and External Practical Training) (TPT)	24
Elective subjects	6
Final Degree Project (FDP)	6
Total ECTS	300

The training activities are carried out in groups of different sizes depending on the ULE regulations (link, pag. 5). The number of students according to the type of group is decided by the Faculty and the ULE each year based on the number of students enrolled in each course:

- Large groups, of 80-100 students per group, for lectures.
- Medium-sized groups, of 40-50 students, for in-person practices, seminars and supervised self-study are carried out.
- Small group sizes, 20-25 students, for clinical and non-clinical practical activities.
- Special groups of 10-13 students, for hospital practices that involve very restricted groups of students and for TPT.

The number of hours of each activity is proposed by professors of each subject and published in the Teaching Guides (TG) (link).

The curriculum proposed was favourably reviewed by ANECA (National Agency for Quality Assessment and Accreditation) following verification by the ACSUCYL (both members of ENQA) and was approved by the Spanish Ministry of Education on 27th June 2011 (published in the State Bulletin no. 168, on 14th July 2011). Its accreditation was renewed by ACSUCYL on 6th June 2017 and ratified by the Spanish Ministry of Education on 28th June 2017. The Degree in Veterinary Medicine at the ULE was recognised by the Spanish Ministry of Education as a MECES 3 qualification (EHEA Second Cycle, i.e., Master level) on 23rd April 2015. All aspects relating to the qualification and its legal status are recorded in the Registry of Universities, Establishments and Titles (RUCT) of the Ministry of Education.

Since the introduction of the Degree in Veterinary Sciences in the academic year 2010/2011, non-substantial modifications have been approved.

The design of the current curriculum (Tables 3.1.3, 3.1.4 and 3.1.5) required extensive and complex work to achieve the highest degree of coherence and integration, eliminating overlaps, redundancies, and omissions. This task was undertaken by a Curriculum Committee, appointed by the Faculty Board. Additionally, an external Advisory Committee was established, comprising professionals and alumni from all fields of veterinary practice, in line with new legislation, recommendations from EAEVE, and the Veterinary Degree White Book (VDWB) (link). After deliberating on the submitted amendments, the Faculty Board approved the "Verifica" evaluation document and published it on the website (link).

Since the new plan was implemented, various mechanisms and commissions were established to identify possible inconsistencies, overlaps, redundancies and omissions:

- Quality Committee: comprised of representatives of the teaching staff, students, support staff and professionals from different branches of veterinary medicine who annually review the teaching guides and compile information and evidence on the development of the studies. It also collects data on the results of the degree and performance indicators and receives

suggestions and satisfaction reports from all interest groups, especially students. The Quality Committee prepares an annual self-assessment report and develops improvement plans.

- Academic Coordination Meetings: carried out by the Veterinary Degree Coordinator, Vice Dean of the Faculty, the professors responsible for subjects and the student representatives. Meetings are held three times a year to analyse the evolution of the course and identify possible improvements and to establish class and exam schedules.
- Faculty Board: is the body in charge of examining, evaluating and approving any change in the study plan.

This framework of action incorporates all stakeholders (teachers, students, support staff and a representative of the Official College of Veterinarians of León) and develops reviews and makes decisions to improve all aspects of the curriculum.

In the Common Basic Veterinary Sciences module, some subjects include teaching activities (whether involving work with animals or not) that provide clinical insight (pre-clinical activities).

The curriculum of the Veterinary Degree at FVULE is organised into a series of subjects with a minimum of 3 and a maximum of 14 ECTS (Appendix 5). The "subjects" are individual educational units that are taught and assessed independently. Over a total of 5 academic years - 10 semesters - subjects are limited to one semester. The first 9 semesters cover the main part of the curriculum, while the 10th semester (30 ECTS) is aimed at further developing and verifying the achievement of professional competencies and skills D1C in realistic scenarios.

The subjects studied by each student in each academic year and the corresponding number of curriculum hours are shown in precise detail in Tables 3.1.2 and 3.1.3.

Table 3.1.2. General table of curriculum hours taken by all students (Corresponds to table 3.1.1. of the SOP)

	A	B	C	D	E	F	G	H
Year 1	261	96	118.1	118	58	27	821.9	1,500
Year 2	311	46	17	154		23	949	1,500
Year 3	318	87	59	66		116.5	853.5	1,500
Year 4	215	88.5	79	63		151.5	903	1,500
Year 5	156	37	181.5	64	90	373	598.5	1,500
	1261	**354.5**	**454.6**	**465**	**148**	**691**	**4125.9**	**7,500**

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical work; F: clinical animal work; G: others (tutorials, field visits, reports, expositions and evaluations…); H: total.

* *Each academic year is divided into 2 semesters*

Table 3.1.3. Curriculum hours taken by each student (Corresponds to table 3.1.2 of the SOP)

SUBJECTS	A	B	C	D	E	F	G	H
Basic subjects								
Medical physics	14	26	21	8			6	75
Chemistry (inorganic and organic sections)	14	26	21	8			6	75
Animal biology, zoology and cell biology	2						2	4
Feed plant biology and toxic plants	32	10	26	12			70	150
Biomedical statistics	11		1	6			29.5	47.5
Specific veterinary subjects								
SUBJECTS	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**
Basic Sciences								
Anatomy, histology and embryology	72		7.1	45	56	6	338.9	525
Physiology	58	7	35	30	2	4	164	300
Biochemistry	54	12		15			144	225
General and molecular genetics	34	2		21			93	150
Pharmacology, pharmacy, and pharmacotherapy	41			32			105.5	178.5
Pathology (included Physiopathology)	68	9	4	30		13	201	325
Toxicology	45	7	17.5	14			79.5	163
Parasitology	30		4	22			94	150
Microbiology	44			27			142.5	213.5
Immunology	16			13			57.5	86.5
Epidemiology	21		2	16			63.5	102.5
Information literacy and data management			120.5	14			44.5	179
Professional ethics and communication	5	4	36.5				17.5	63
Animal health economics and practice management	7	5		4			49.5	65.5
Animal ethology	15	14					44	73
Animal welfare	14	6				5	53.23	78.23
Animal nutrition	42	26		6			126	200

Clinical Sciences in companion animals (including equine and exotic pets)								
Obstetrics, reproduction and reproductive disorders	25	6		6		18	95	150
Diagnostic pathology		15.2	1.2			22.5	40.6	79.5
Medicine	30		14			25	109.8	178.8
Surgery	24	14	17			43	98	196
Anaesthesiology and analgesia	9					10	23	42
Clinical practical training in common companion animals	15	3.5	2.5			251	54.8	326.8
Infectious diseases	36	7	4	8		14	121	190
Preventive medicine	5	2					14	21
Diagnostic imaging	9					10	20	39
Therapy in common animal species				5			7.5	12.5
Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)								
Obstetrics, reproduction and reproductive disorders	28	5.5		6		18.5	92	150
Diagnostic pathology		22.8	1.8			27.5	42.4	94.5
Medicine	30		13			23	105.2	171.2
Surgery	11	14	17			26	46.5	114.5
Anaesthesiology and analgesia	5					2	13	20
Clinical practical training in common food-producing animals	15	3.5	2.5			82.5	45.7	149.2
Infectious diseases	71	10	12	16		17	209	335
Preventive medicine	10	6			2	4	37	59
Diagnostic imaging	4					2	5	11
Therapy in common food-producing animals				5			7.5	12.5
Animal Production, including breeding, husbandry and economics	126	40	8	28	1	12	349.27	564.27
Heard health management			19.5			70	70	159.5

SUBJECTS	A	B	C	D	E	F	G	H
Veterinary Public Health (including Food Safety and Quality)								
Veterinary legislation including official controls and regulatory veterinary services, forensic veterinary medicine and certification	13	12	28.5	14	49		99.5	216
Control of food, feed and animal by-products	9	15	1	23	3		65	116
Zoonoses and their prevention	21	2					38	61
Food hygiene and environmental health	47		1	19			106	173
Basic food technology	56	10	2	12	36		162.5	278.5

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical work; F: clinical animal work; G: others (tutorials, field visits, reports, expositions and evaluations…); H: total.

*Note: Subjects linked to **Professional Knowledge** (including soft skills, e.g. communication, team working skills, management skills) are incorporated within the subcategories and include inter alia Information literacy and data management, Professional ethics and communication, Animal health economics and practice management, Clinical practical training in common animal species, Herd health management and Veterinary legislation.*

The teaching strategy encompasses various modalities, including theoretical classes, seminars, problem-based learning, evidence-based medicine, laboratory and desk work, work with non-clinical animals, and clinical work with animals. A detailed description of the teaching schedule is available on the website, and the timetable can be consulted online.

First and second-year students typically have 3-4 hours of theoretical classes and 4 hours of other mandatory activities (seminars, laboratory work, work with non-clinical animals, etc.) per day. For theoretical classes, all students of the same year (approximately 100) are taught in a single group; for other modalities, teaching is organised into smaller groups of 10 to 20 students. Clinical topics and activities are included in many subjects, either with or without direct work with animals. In addition to gaining comprehensive knowledge in various disciplines, preclinical studies include seminars, problem-based learning sessions, exercises, and laboratory practices that provide a clinical approach.

Students in the 5th to 9th semesters are also divided into subgroups of 4-20 students depending on the teaching modality: visits to slaughterhouse, seminars, case studies to develop evidence-based medicine, specialised laboratory diagnostics, clinical visits to farms (mainly ruminants and pigs), and clinical practices in the Teaching Veterinary Hospital (small animals and equids). Several hours of direct practical work with individual patients and herds are mandatory, using relevant diagnostic data. For the 10th semester, students have 11.4 weeks of Practicum, which is also organised into rotations between clinical and non-clinical activities (Table 3.1.4). During the Practicum, students spend 3 weeks at the Teaching Veterinary Hospital (VTH Services, 2-5 students per group), 1 week in the Anatomic Pathology Diagnostic Service (16 students per group), 4 days in the Ambulatory Clinic (1-4 students per group); 2 days in Slaughterhouse Practice (2-3 students per associate teacher), 2 days in Official Public Health Services (2-3 students per associate teacher), 1 week in Pilot Plant of food Technology (FPP) (25 students per group); 1 week on farms (1-3 students per group), 1 week in

Official Animal Health Services (7-10 students per group); 12 days in an Elective Practice (EPT) (1 student per EPT), generally in hospitals and private clinics. During the 10th semester students also dedicate themselves to their Final Degree Project (FDP).

In the VHFVULE, students are assigned to different clinical services, which also involve two 11-hour shifts and one 24-hour shift. For 3.2 weeks, they focus on the medicine and surgery of companion animals: Anaesthesia, Diagnostic Imaging, Surgery, Dermatology, Cardiorespiratory, Internal Medicine, Oncology, Ophthalmology, Clinical Pathology, Reproduction, Hospitalisation and Intensive Care. Also, in equine medicine, and Pathological Anatomy Diagnostic Service. Students also rotate in ambulatory clinic of bovine, ovine, equine, rabbit or poultry, outside of the FVULE for 4 days.

During this rotation, students will develop specific clinical skills: general knowledge of animals, their behaviour and principles of identification; structure and function of healthy animals; breeding, improvement, management, and welfare of animals; physical, chemical, and molecular principles of the main processes taking place in the animal organism; knowledge of changes in the structure and function of the animal organism; knowledge and diagnosis of various animal diseases, both individual and collective, and their prevention, with special emphasis on zoonoses and notifiable diseases; general principles of medical-surgical treatment; knowledge of the principles of operation and optimization of animal production systems and their impact on the environment; perform anamnesis and clinical examination of animals; take and send all types of samples with the corresponding report; perform basic analytical techniques and interpret their clinical, biological, or chemical results; diagnose the most common diseases using various general and instrumental techniques, including necropsy; treat emergencies and provide first aid in veterinary medicine; perform the most common medical-surgical treatments in animals and know the basic principles of providing appropriate techniques of anaesthesia and analgesia; apply the basic procedures that ensure the correct functioning of reproductive activity, technological processes, and the resolution of obstetric problems.

In Animal Production and Health Rotation (APHR), students dedicate 1 week to stay in units of pigs, cattle, horses, goats, sheep, rabbits, and poultry, among others. During this period, students are also involved in animal handling, feeding, biosecurity protocols, farm records, milking, reproductive, breeding, and improvement programs, etc. During the APHR, also students commit one week to staying with Animal Health's Official Veterinary Service (AHS-OVS). Students will acquire knowledge and diagnosis of different individual and collective animal diseases, and their prevention measures, with special emphasis on zoonoses and notifiable diseases; they must identify, control, and eradicate animal diseases, with special emphasis on notifiable diseases and zoonoses, advise and conduct epidemiological studies and therapeutic and preventive programs according to animal welfare, animal health, and public health standards; evaluate and interpret the production and health parameters of a group of animals, taking into account economic and welfare aspects; perform risk analysis, including environmental and biosecurity risks, and their evaluation and management. Student work is organised around visits to the TFULE.

In Food Hygiene and Technology Rotation (RHTA), during the FPP (1 week) a group of 25 students are assigned to manufacture and evaluate food products. During this week, students work on the principles of food science and technology, quality control of processed foods and food safety, risk analysis including environmental and biosecurity risks and their assessment and management, and the application of food technology to the production of foods for human consumption. A structured rotation is also carried out around 2 sessions with Public Health Official Veterinarians (PH-OVS) where students visit catering businesses and agri-food industries applying Hazard Analysis and Critical Control Points (HACCP). For 2 days, groups of 5 students participate as Slaughterhouse Official Veterinary Service (SOVS) in the daily activities of a selected ruminant slaughterhouse, under the direct supervision of an official veterinarian. The slaughterhouse is selected and agreed upon with the regional zoonosis and food safety services of the regional health authority. Students follow the slaughterhouse schedule and perform all activities as OVS. During this period, students are required to carry out the normal tasks of the Public Health Official Veterinarians acting as supervisors. Students

maintain a daily log of their activities and must prepare a report that is evaluated by the assigned tutor professor.

During the EPT in the Practicum (3.2 weeks), students are supervised by practising veterinarians who allow them to face all aspects of the routine in private clinics or farms, primarily. Before the start of the 10th semester, students inform the Dean's Office of their practice choice, and in most cases, students complete their EPT in their first option.

The practice assessment is carried out by both internal and external academic tutors. After each rotation, students must write a specific report for each rotation: clinical cases studied using evidence-based medicine; activities with the Official Veterinary Services, or the EPT activity report. All these reports are evaluated, about both knowledge and technical skills, by the assigned internal tutors, including behaviour and attitude of the student. A minimum grade of 5 out of 10 is required to pass each rotation. An e-assessment sheet has been developed for the Official Animal Health Veterinarians and for the ambulatory clinic Veterinarians.

The 4 elective subjects in the curriculum are in the 2nd semester (1st year) and the 4th semester (2nd year). The curriculum hours taken in electives are summarised in Table 3.1.5. Students are expected to take 6 elective ECTS, out of the 12 offered, through 2 of the electives (3 ECTS each). As established by the ULE regulations (link) and the verification report for the Degree in Veterinary Medicine the credits for these subjects can be recognized by other activities (link): university cultural, sports, student representation activities, solidarity and cooperation, training activities specific to the degree, such as company internships.

Additionally, a variety of courses and complementary activities are offered to students every year, often in coordination with the student council. These courses always have the academic supervision of the FVULE or of one of the departments. The Dean's Office also organises a range of activities aimed at students, notably the Conferences on Career Opportunities (annually), coordinated with the professional associations of Veterinarians in the fields of veterinary medicine, animal production, bromatology and food technology, public administration, research and teaching.

Table 3.1.4. Practical rotations under academic staff supervision (Corresponds to table 3.1.3 of the SOP)

SUBJECTS	List of practical rotations (Disciplines/Species)	Duration (days)	Year
Intra-mural clinics (VHULE)	Equine Medicine and Surgery Service	3	5
	Small Animal Surgery Service, Operating Rooms	3	5
	Small Animal Internal Medicine Service	3	5
	Small Animal Hospitalization Service	3	5
	Small Animal Emergency Service (1 shift of 24 hours)	1	5
	Hospital Shifts (2 shift of 11 hours)	2	5
	Laboratory Diagnostic Service; Imaging Diagnosis; Anatomopathological Diagnosis	7	5
Ambulatory clinic and Animal Production	Herd Health Management Large Animals (mainly small ruminants, cows and pigs) and Animal Production Activities	5	5
	Official Veterinary Services for Animal Health	5	
	Ambulatory Clinic	4	
FSQ and VPH	Official Veterinary Services for Public Health	2	5
	Slaughterhouse Official Veterinary Services	2	
	Intra-mural Practices (FPP)	5	
Placements	Internal medicine, Surgery, Hospitalization and Emergency Service	12	5

Table 3.1.5. Curriculum hours taken as electives for each student (Corresponds to table 3.1.4 of the SOP)

Electives	A	B	C	D	E	F	G	H
Basic subjects								
History of veterinary	26	36					13	75
Scientific and technical English	12	11	8				44	75
Anatomy and physiology of wild, exotic and laboratory animals	11	1	6			10	47	75
Applied informatics	1			23			51	75

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work, E: non- clinical animal work; F: clinical animal work; G: others (specify); H: hours to be taken by each student per subject group

(As there are not optional courses proposed to students (not compulsory) in our VEE, Table 3.1.5 of the SOP is not provided)

Standard 3.2: ***Each study programme provided by the VEE 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 VEE must provide proof of a QA system that promotes and monitors the presence of a teaching 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 VEE must also describe how it encourages and prepares students for lifelong learning.

The FVULE curriculum is based on the acquisition of competences, abilities and skills and is designed in such a way that all the competences (and abilities and skills) to be acquired are distributed throughout the various modules and subjects, to ensure that all of them are covered in at least one subject (link).

The acquisition of competences and abilities in the various subjects of the curriculum is demonstrated by **the learning outcomes**, which are also identified for each subject and in overall terms ensure the achievement of the **programme objectives**, in those **stipulated by European** (Dir 36/2005/EC) **and national regulations** (RD 1837/2008) governing veterinary training, complying with the training requirements for practising sanitary professions (Law 44/2003), in accordance with Order ECI/333/2008.

Therefore, the qualification resulting from the FVULE programme is clearly specified and refers to the correct level of the national qualifications framework for higher education and to the Framework for Qualifications of the European Higher Education Area (EHEA).

The relationship between the competences, learning outcomes and objectives for each subject are set out in the respective Teaching Guides (link). There is a procedure for redacting, reviewing and publishing the teaching guides (link). The approved Teaching Guides are published on the FVULE website (link)

TG also set out the competence-based learning strategy, specifying the training activities that will be pursued, as well as the systems and criteria for evaluating each competence. The programmed activities are oriented towards learning not only specific content, but also the transversal competences of self-learning. In this context, all FVULE subjects use the Moodle platform (https://agora.unileon.es/), which enables personalized learning environments to be created, with multiple training tools available to students.

The Tutored Practical Training (TPT) (24 ECTS) empowers students to face the challenges of the professional world and guide them toward their career future. On the other hand, the Final Degree Project (Year 5, S2, 6 ECTS) requires students to conduct an exhaustive bibliographical review, explore and search for solutions to problems affecting the veterinary profession, thereby fulfilling the training's objective to enhance learning.

Standard 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.

The degree programme was designed and developed to provide a coherent education, aligned with the objectives of the degree. The relationship between competencies, learning outcomes, and how these are achieved is defined at the subject level and described in the individual programme of each. The programmes are reviewed annually and are subject to the approval of the Department Council, then validated by the Teaching Committee and the Quality Committee of the FVULE, and finally reported by the Centre Board. The FVULE curriculum is based on a list of competences, divided into 3 categories, derived from ANECA's 'White Book of the Veterinary Degree' (except the basic competences, formulated by the University; the same for all degrees of ULE): Basic skills (5), Transversal or generic competences (11), and Specific competences (85).

Based on these competences, the primary educational objective of the curriculum is to ensure that students achieve a competent level of knowledge and skills in all areas of the veterinary profession. This is accomplished through a progressive and comprehensive competence-based learning process, with educational objectives and a workload for a total of 300 ECTS credits. These objectives pursue a set of learning outcomes (Appendix 5) associated with each specific subject of the curriculum.

The achievement of the curriculum competences is determined through the evaluation of learning outcomes. Thus, regardless of its classification -basic, pre-clinical, clinical, animal husbandry, animal health or food hygiene-, each subject has a competence-based evaluation system designed to ensure that each graduating student has achieved the curriculum competences. For instance, in most subjects, the evaluation includes not only the traditional theoretical exam but also a series of practical tests and checks, which together ensure that students not only know, but also demonstrate competence in various professional areas. The most common way to verify this is through the evaluation of practical work (in some cases continuous assessment), the demonstration of critical thinking, and the correct identification of problems related to different professional scenarios. All types of assessments are taken into consideration, and students are graded accordingly. All information about the evaluation is included in the Teaching Guides (TG) and described in detail in Area 8 (Student assessment).

The relationship between competences, learning outcomes, and how they are achieved is defined at the subject level and described in detail in the Teaching Guide of each subject. Annually, the TGs are reviewed, discussed, and finally approved by the Department Councils, then validated by the Teaching Committee and the Quality Committee of FVULE, and finally reported by the Faculty Board. Indeed, the Teaching Guides can be considered as 'formal contracts' between academics and students, serving as a reference for the implementation and monitoring of the learning process.

Standard 3.4: The VEE 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 ongoing reviews and periodic in-depth reviews of the curriculum (at least every seven years) by involving staff, students and stakeholders; these reviews must lead to continuous improvement of the curriculum. 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.

As indicated in the previous section, the process of designing, communicating, evaluating and revising the core curriculum is undertaken in a coordinated way together with the other aspects of the degree programme (learning outcomes, structure, objectives, assessment criteria, etc.).

The drawing up of the core curriculum was a fundamental part of the design of the new degree programme, as was pointed out in section 3.1.

The procedure and the committees involved are those that have already been set out in section 3.1 and in the preceding section. Curriculum changes are communicated to teaching staff, support staff, students and stakeholders using the FVULE website.

As previously mentioned, competencies and learning outcomes are established in all subjects (link), over five academic years, each year divided into two semesters.

The Appendix 5 contains the relationship between the ESEVT Day One Competences and the various courses of the Degree that develop them. Certification of the skills and/or competencies acquired by students during their Veterinary Degree practices is done through assessment tests (see Area 8 - Student Assessment).

The re-evaluation of each individual course's programme is carried out through the Course Council meetings, held three times during the academic year. Generally, students perceive the effectiveness of the procedure as a result of the faculty's willingness to accept suggestions and requests from the Quality Committee of the FVULE.

The following structures serve as specific instruments for evaluation and review:

- QCFVULE, Quality Committee, composed of the Dean (president of the Committee), the Faculty Secretary, the Quality Coordinator of the FVULE, Coordinators of the Faculty's degrees (including the Coordinator of the Veterinary Degree), the Coordinator of the Tutorial Action Plan, a student representative, a PTGAS representative, a member of ULE's Evaluation and Quality Office (OEC), and two employer representatives from different professional fields. This Committee is responsible for approval the annual monitoring report for the degree and proposing actions to improve the quality of teaching. The supervision is carried out by the OEC according to specific regulations (link).
- Teaching Committee, chaired by the Dean and including the coordinator of the Veterinary Degree, course coordinators, a student representative, and a PTGAS representative.
- Veterinary Degree Course Councils, composed of the Degree Coordinator (acting as the president of the Committee), the teachers responsible for the subjects of each course, and the student representatives of the course.
- Degree Monitoring Committee, formed by the Degree Coordinator (acting as the president of the Committee), the Course Coordinators, a student from the Degree, and a PTGAS representative.
- Final Degree Project (FDP) Committee, with specific regulations (link).

- External Practices Committee, consisting of two student representatives and six members representing the knowledge areas of: Comparative Anatomy and Pathological Anatomy, Pharmacology or Animal Physiology, as Basic Sciences; Animal Medicine and Surgery; Animal Health; Animal Production; Food Technology and Nutrition and Bromatology. This committee is chaired by the Dean and oversees the planning, development, and evaluation of external practices. There are also specific regulations (link).

Standard 3.5: ***Elective Practical Training (EPT) includes compulsory training activities that each student must achieve before graduation to complement and strengthen their core theoretical and practical academic education, inter alia by enhancing their experience, professional knowledge and soft skills. Like all elective activities, its contents may vary from one undergraduate student to another. EPT is organised either extra-murally with the student being under the direct supervision of a qualified person (e.g. a veterinary practitioner) or intra-murally, with the student being under the supervision of a teaching staff or a qualified person.***
EPT itself cannot replace the Core Clinical Training (CCT) under the close supervision of teaching staff (e.g. ambulatory clinics, herd health management, practical training in VPH (including Food Safety and Quality (FSQ)). A comparison between CCT and EPT is provided in Annex 6, Standard 3.5.

Elective Practical Training (EPT) is a part of the compulsory module comprising 24 ECTS credits, that includes Tutorized Practical Training (TPT) and Final Degree Project (FDP) and is conducted during the 10th semester. This training implies the participation of the students in professional companies within a non-academic setting, allowing them to immediately apply and practise the competencies and skills acquired during their formal education. This module of supervised practices consists of the following subjects:

- Clinical Rotation (9 ECTS), including placements at VHULE (services in internal medicine and surgery for small and large animals, hospitalisation, diagnostic imaging, necropsy service) and ambulatory clinic.
- Placements (4.5 ECTS) in external companies, ULE Services, ULE Research Groups.
- Animal Production and Health Rotation (6 ECTS) at a external farm and with the Animal Health's Official Veterinary Service (AHS-OVS).
- Food Hygiene and Technology Rotation (4.5 ECTS), FPP or in a food manufacturing company and with the Public Health's Official Veterinary Service (PH-OVS).

This activity enables the students' practical specialisation, as they can choose in any of the veterinary profession's fields (mainly Clinical Sciences and Animal Health), including research initiation. For this, students can utilise resources from veterinary clinics, veterinary hospitals, companies, academic institutions, research centres, administrative institutes, governmental health entities, etc. All students have access to the complete list of available placements on the FVULE website (link). Currently, there are over 427 companies related to the veterinary profession with a signed agreement. New placements can be easily added. Students are able to propose an entity for the EPT. The list is updated annually. Furthermore, entities may voluntarily offer themselves to be included in this list. In all cases, it is first verified that the entity meets the requirements for student training. All the related information is available at https://veterinaria.unileon.es/practicas-externas/

These subjects are coordinated by the Dean's office, along with the professors responsible for them, in collaboration with the EPC, all supported by administrative assistance. The management of the External Practices Committee is governed by the External Practices Regulation (link), the State Academic Regulations (RD 592/2014, of 11 July, B.O.E. no. 184, of 30 July 2014), and the ULE regulations (link).

Twice during the academic year (first in February and then in September), an orientation meeting is held with the students to inform them about the process for applying for the TPT and how the activity is carried out. These orientation meetings are done in Year 4-S2 and in Year 5-S1. A list of

procedures stipulating all necessary information for the application and execution of the TPT is published on the previously mentioned website. Forms for application are also available online. Registration for the subjects must be done within the official period set by the ULE (July and February-March of each academic year). Students follow the standard registration procedure (enrolment) and fill out the TPT application form. Many students carry out in advance part of their practical training during the vacation period in the Summer between the 4th and 5th years.

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

Fields of Practice	Minimum duration (weeks)	Year of programme
Production animals (pre-clinical)	3 weeks and 2 days (136 h) (all fields of practice included)	5 (all fields of practice included)
Companion animals (pre-clinical)		
Production animals (clinical)		
Companion animals (clinical)		
VPH (including FSQ)		
Others (specify)		

Each student is assigned two tutors: one at the FVULE (academic or internal tutor) (Table 3.5.2) and another at the external entity (external tutor), who is directly responsible for the student's training. The entities are responsible for assigning the external tutor. Students actively participate in the whole process, including contact with external entities. After the assignment, students can contact the academic tutor at any time if they need assistance in the process or encounter any difficulties.

Table 3.5.2. Number of academic tutors available in the FVULE

DEPARTMENT	2022-2023	2021-2022	2020-2021	% *vs* Total
Animal Health	8	9	10	30.30
Veterinary Medicine, Surgery and Anatomy	14	12	14	46.46
Animal Production	12	10	11	12.12
Food Hygiene and Technology	11	12	13	12
Biomedical Sciences	2	1	1	7.07

The assessment of practical training is conducted through an evaluation report by the external tutor and the activity report prepared by the student. In the report, the external tutor evaluates the student's participation in assigned tasks, professional conduct, knowledge and skills, and ability to deal with daily problems. The academic tutor reviews and grades the student's report (a detailed document of the activities carried out), provided the external tutor’s report is satisfactory.

The achievement of the curriculum competencies is evaluated through the assessment of learning outcomes, which forms part of the external tutor's report and should be described in the student's report. This assessment ensures that each graduating student has attained the curriculum competencies. Overall, the process ensures that students not only know but also demonstrate their competence in various professional domains (day-one competencies).

Standard 3.6: The EPT providers must meet the relevant national Veterinary Practice Standards, have an agreement with the VEE and the student (stating 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 VEE on the EPT programme.
There must be a member of the teaching staff responsible for the overall supervision of the EPT, including liaison with EPT providers.

The ULE has an Employment Orientation and Information Centre (COIE) which, among other functions, performs the administrative management of the practices and deals with the legal binds (agreements) with the companies. Any student has access to the full list of available placements on the COIE website. As mentioned before, more than 427 companies related to the Veterinary profession are listed, and new placements can easily be added through the signature of an official agreement.

During the EPT students are supervised by two tutors, one academic (ULE) (see table 3.5.2) and one veterinary practitioner from the company. The practitioner in charge of tuition is the one responsible for certifying the achievement of professional skills on-site, while the academic tutor evaluates a detailed report delivered by the student (Appendix 5.6).

The teaching staff responsible for the supervision of the EPT are the members of the of External Practices Committee (EPC):

- Prof. María Teresa Carbajo Rueda, Dean
- Prof. María José Ranilla García, Vice-Dean
- Prof. Avelino Álvarez Ordóñez
- Prof. Miguel Ángel Tesouro Díez
- Prof. María del Camino García Fernández
- Prof. Maximino Fernández Caso

Standard 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 VEE and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The VEE must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.***

Students have the freedom to choose the institutions where they perform their Elective Practical Training. The choice of Establishment largely depends on the students' inclinations and interests; because they make their selection from a list of companies that have an Active Collaboration Agreement (ACA) with ULE, students actively participate in the acquisition of new ACAs.

The EPT coordinator informs students about the procedures to follow (as mentioned, in previous coordination meetings). Furthermore, students can freely contact the coordinator, who will provide final details about any procedures related to the EPT.

Students are encouraged to make contact with the establishments and share their interest in undertaking EPT. Contact details of the establishments are available to the students.

Once the establishment is assigned, the student completes the relevant forms under the supervision of the academic tutor. Then, the forms are signed by all interested parties (tutors and student).

At the end of the EPT period, students are required to prepare a report on their practical training and account for clinical cases. The students are familiar with the EPT report model, evaluation criteria, and are assisted throughout this period by an assigned academic tutor who provides guidelines on how to prepare the report.

Students are asked to express their level of satisfaction with the EPT in the report they prepare, which will be made available to the academic tutor. The student's report is the tool used to assess the competences and skills acquired during the EPT.

The complaints process for EPT is similar to that established for other degree subjects. There is an official procedure for submitting complaints through the Quality Assurance (link). The feedback from the external tutor is used to make decisions for better development of the EPT.

In addition to the curricular training of students, FVULE offers students the opportunity to undertake non-curricular external practices, termed Extracurricular External Practices (EEPT). This practical activity, not included in the curriculum and entirely voluntary, is carried out outside university hours and is offered as additional training to complement, on top of the compulsory Supervised Practices, the knowledge acquired in their academic training, fostering the acquisition of competencies, student employability, and entrepreneurial capacity. This type of practical training represents the opportunity to acquire additional practise that complements the core intramural training. In some cases, it represents the possibility of specialisation for students (Table 3.7.1). The regulations governing this type of training follow the same procedures as the mandatory EPT. The EEPT can be included in the European Supplement to the Diploma. Some examples and student attendance are presented in Table 3.7.1.

Table 3.7.1. Examples of student's attendance to the EEPT

Fields of Practice (minimum duration 2 weeks)	Year of program	Student distribution in the last five years (%)
Production animals (clinical)	1st to 5th	11.97
Companion animals (clinical)	1st to 5th	81.27
FSQ & VPH	1st to 5th	0.77
Others (specify)	1st to 5th	5.99

Comments on Standard 3

A wide range of teaching methodologies are utilised, and many lecturers participate in innovative teaching activities, both theoretical and practical. Internal and external premises have been consolidated for intra and extramural practices, enabling our students to adequately develop their External Practical Training.

The inclusion of EPT in the current curriculum has improved the acquisition of various specific professional and scientific skills by students. Upon returning from their external practice period, the students agree that this duration should be extended. This extension could be achieved if the proposed increase of 60 ECTS for the Degree in Veterinary Science, requested by the Conference of Deans of the Spanish VEEs, is finally approved.

The ESVET visit presents an opportunity to review and analyse the current situation for improvement, which, together with the recommendations from the visit, will help in prioritising the issues to be addressed and the sequence in which they should be undertaken.

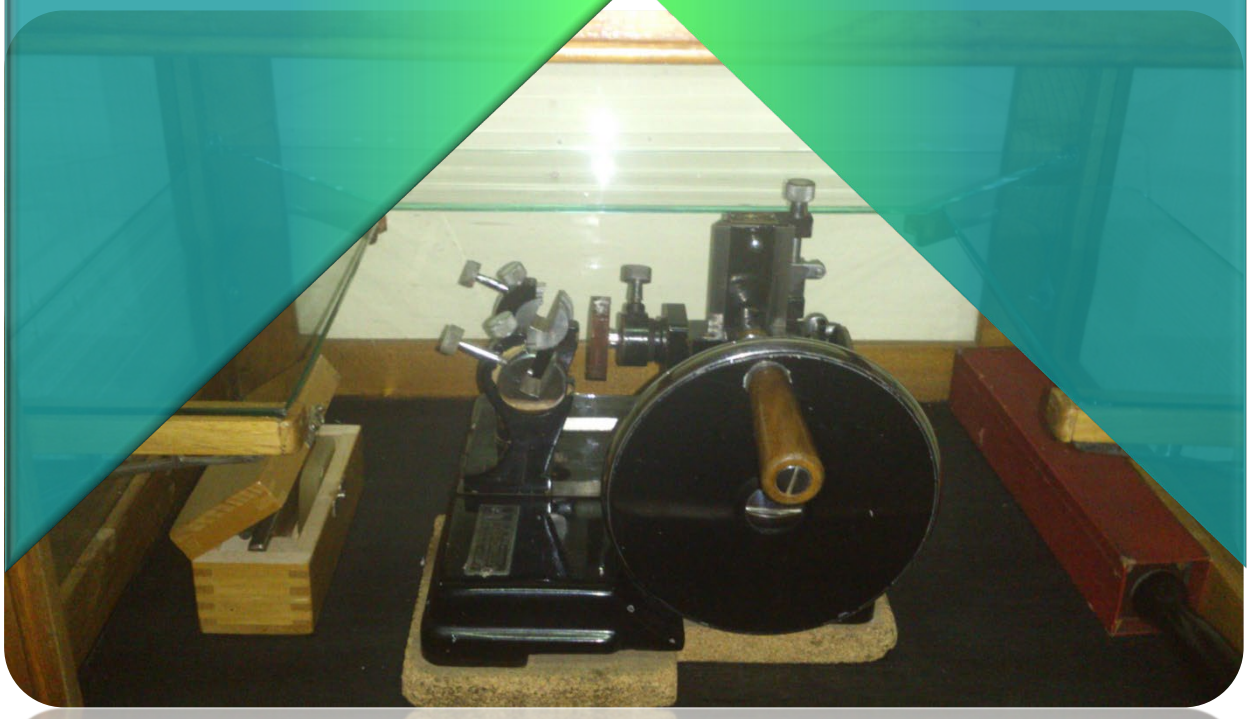
Suggestions for improvement on Standard 3

The Spanish Conference of Veterinary Faculties has proposed to the Ministry of Education and Vocational Training to extend the duration of the Veterinary Science Degree by one year (60 ECTS). This would allow for a better redistribution of the total teaching time in the field, enhance the practical content of clinical subjects, and include new elective subjects and emerging areas in the field of veterinary sciences, such as veterinary physiotherapy, in order to improve the approach to certain currently underdeveloped professional profiles.

Currently, the Curriculum is being revised to comply with Royal Decree 822/2021, dated 28th September, which establishes the organisation of university teachings and the procedure for assuring their quality.

Finally, it is necessary to advise students on the full professional competencies of a veterinarian (including food safety in abattoirs) to ensure they are aware of these aspects.

AREA 4. FACILITIES AND EQUIPMENT



AREA 4. FACILITIES AND EQUIPMENT

Standard 4.1: All aspects of the physical facilities must provide an environment conducive to learning, including internet access at all relevant sites where theoretical, practical and clinical education takes place. The VEE 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 including students with a disability, and EU animal welfare and care standards.

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

The Faculty of Veterinary Medicine is an integral part of the Vegazana Campus, along with the other 13 centres that comprise the University of León. The only exception is the School of Agricultural Engineering, situated off-campus.

Located on the outskirts of León, the Vegazana Campus is situated approximately 2 kilometers Northwest of the city centre. The campus enjoys excellent connectivity and is easily accessible via several modes of transportation. It can be reached by bus using lines 3, 4 and 12, by private vehicle due to its proximity to the city's beltway, or even on foot, with a brisk 20-30 minutes walk from the city centre. It is also possible to reach the Vegazana Campus using a bike lane, which provides suitable bicycle access from the centre and other areas of the city, offering a sustainable and healthy transportation option for students and staff.

The general objective of the FVULE is to create an environment tailored for learning, group working, and equipped with the latest technology. The VEE's facilities and equipment, as well as general actions on the main campus and the teaching farm, are coordinated and supervised by the Vice-Rector for Infrastructure and Campus. In the last two years, significant improvements have been made in the main building, the Teaching Farm, and the Veterinary Hospital. Similarly, over the last five years, through this Vice-Rectorate, the University of León has developed plans for the provision of teaching infrastructure, allowing for, among other things, simulators to improve the learning experiences and opportunities of our students, which are also complemented by equipment acquired in the plans for infrastructure provision for research and the addition of new devices for the VHULE. The infrastructure and maintenance service, also dependent on the Vice-Rectorate of Infrastructure and Campus, ensures that all physical facilities comply with current legislation. Biosecurity and animal care and welfare are overseen by staff members assigned to the laboratories, the Teaching Veterinary Hospital and the teaching farm.

The buildings associated to the Veterinary Faculty are:

- Module 1 (M1): Main building
- Module 2 (M2): Veterinary Teaching Hospital
- Module 3 (M3): Teaching farm (outside the city, 1.5 km away)

In addition, shared with other degrees, there are facilities near the Veterinary Faculty related to research and education in Veterinary Sciences, such as:

- Module 4: Animal house
- Module 5: Institute of Livestock Development
- Module 6: Institute of Molecular Biology, Genomics and Proteomics
- Module 7: Food Science and Technology Institute (out of the campus)
- Module 8: Instrumental Techniques Laboratory
- Module 9: Central library.

Close to the university campus, and therefore to the Faculty of Veterinary, there are other facilities belonging to the Autonomous Government, also related to research and education in Veterinary Sciences:

- Animal Selection and Reproduction Centre
- Regional Animal Health Laboratory

M1. Main Building. Most of the teaching activity takes place in this building, which holds the classrooms, administrative services, departments, library, laboratories, rooms for work group/study/self-learning and computer classrooms.

The building, constructed in 1982, has four floors (ground, 1st, 2nd, and 3rd), which together account for 17,118 m^2 of constructed area and 15,378 m^2 of usable area.

The premises of this building are:

A. Ground floor:
   - Hall
   - Administration and Dean's Office
   - Lecture rooms: 1A, 1B, 2 to 12
   - Paraninfo (Main Auditorium) and Aula Magna (Auditorium)
   - Meeting rooms and/or exhibition spaces for work
   - Food Technology Area (Department of Food Hygiene and Food Technology)
   - Animal Production Area (Department of Animal Production)
   - Dissection rooms
   - Food Production Plant
   - Rooms for practice in healthy animal examination and surgical skill acquisition
   - Kennel
   - Changing rooms
   - Library
   - Computer classrooms
   - Break room.

B. First floor:
   - Food Technology Area (Department of Food Hygiene and Food Technology)
   - Animal Production Area (Department of Animal Production)
   - Biochemistry Area (Department of Molecular Biology)
   - Toxicology Area (Department of Biomedical Sciences)
   - Physiology Area (Department of Biomedical Sciences)
   - Group work rooms/study/self-learning (student area).

C. Second floor:
   - Human Nutrition and Food Science Area (Department of Food Hygiene and Food Technology)
   - Animal Production Area (Department of Animal Production)
   - Anatomy Area (Department of Medicine, Surgery and Anatomy)
   - Microbiology/Infectious Diseases Area (Department of Animal Health).

D. Third floor:
   - Pharmacology Area (Department of Biomedical Sciences)
   - Pathology/Parasitology Area (Department of Animal Health)
   - Animal Production Area (Department of Animal Production).

Each department has laboratories for teaching activities (in some occasions, shared by two departments) and several laboratories for research purposes.

M2. Veterinary Teaching Hospital. The VHULE is in front of the main building and is its most important complement. Most of the animal hospitalization areas, as well as the clinic zones, diagnostic laboratories, surgery rooms, etc. are in the hospital building.

The Department of Medicine and Surgery is located on the first and second floor of the VHULE building.

Through the Wi-Fi network, it is possible to browse the internet on laptops and mobile devices, allowing access to electronic resources subscribed by the Library, and any other resource on the ULE network. To access the Wi-Fi network, an institutional email account is required. Access to the web can also be obtained through the Eduroam network.

M3. Teaching Farm. It is located on a 130,000 m² property, 1.5 km from the faculty. It has several facilities (general services, pig, cattle and sheep barns, dog kennels, purification plant, etc.) which in total add up to 5,412 m². Access is easy and quick, just a seven minutes drive from the Campus. However, student transportation is provided by buses hired by the University of León, at the request of the Faculty of Veterinary. This farm has two types of buildings: a) those exclusively for animal production, primarily used by students of the FVULE, in regulated practices for different subjects (Introduction to the Veterinary Profession, Ethnology and Ethology, Reproduction and Obstetric Fundamentals, Breeding and Animal Improvement, Animal Production and Veterinary Hygiene, Pathology of Reproduction and Obstetrics, Rotational Production and Animal Health) and those for experimental purposes, which are part of the Animal House located on the Campus, next to the FVULE.

All buildings and facilities comply with regulatory requirements in terms of sanitary conditions, safety, and biosecurity, as well as European animal welfare regulations.

The ULE has a Risk Prevention Service (link), which is responsible for coordinating, reviewing, and approving the biosecurity and protection protocols applied to academic, clinical, and research facilities.

Procedures involving animals must be submitted to the ULE Ethics Committee (under the responsibility of the Vice-rectorate for Research, (link), whose regulations (link) encompass the provisions of Royal Decree 53/2013, of February 1, which establishes the basic standards applicable for the protection of animals used in experimentation and other scientific purposes, including teaching. This decree transposes Directive 2010/63/EU of the European Parliament and of the Council of September 22, 2010, on the protection of animals used for scientific purposes

Standard 4.2: ***Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number and size, equipped for instructional purposes and 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 teaching and support staff to support their teaching and research efforts.

Premises for lecturing:

Premises for lecturing are mostly located in the main building; all have computers, projection and audio systems. Some other classrooms are situated in the VHULE and the Farm Teaching Farm. The number of places in the lecture halls is 1,531 distributed as follows:

Number of places per lecture hall							
Hall	No. 1A	No. 1B	No. 2	No. 3	No. 4	No. 5	No. 6
Places	128	123	266	266	150	88	88
Hall	No. 7	No. 8	No. 9	No. 10	No. 11	No 12	
Places	42	60	36	48	60	36	
Total number of places in lecture halls: 1,531							

In addition, it is possible to use other lecture rooms located in another building of the University ("Aulario"), only 100 meters from the main building.

Premises for group work:

Group work, seminars, tutorials, and discussion sessions are carried out in small or medium-sized rooms available in different areas of the main building. The total number of places in these rooms is 401, arranged as follows:

Number of places for group work in rooms							
Room	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Places	24	24	12	14	12	10	40
Room	No. 8	No. 9	No. 10	No. 11	No. 12	No 13	No 14
Places	15	10	15	6	14	5	15
Room	No. 15	No. 16	No. 17	No. 18	No. 19	No 20	No 21
Places	6	6	6	10	30	24	20
Room	No. 22	No. 23	No. 24	No. 25	No. 26		
Places	10	18	16	12	27		
Total number of places in lecture halls: 401							

Rooms No. 1-3: Dpt. Animal Production; No. 4-7: Dpt. Animal Health; No. 8-10: Dpt. Food Hygiene and Food Technology; No. 11: Dpt. Molecular Biology; No. 12: Dpt. of Applied Chemistry and Physics; No. 13-15: Dpt. Biomedical Sciences; No. 16-21: Veterinary Teaching Hospital; No. 22-25: student area; No. 26: Farm teaching.

Number of places for group work in laboratories							
Laboratory	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Places	3	4	16	24	20	22	20
Laboratory	No. 8	No. 9	No. 10	No. 11	No. 12	No 13	No 14
Places	20	20	40	20	30	10*	10*
Laboratory	No. 15	No. 16	No. 17	No. 18	No. 19	No 20	No 21
Places	10*	20	15*	20*	10*	3[a]	20[a]
Laboratory	No. 22	No. 23	No. 24	No. 25	No. 26	No. 27	No 28
Places	5[a]	20	14[a]	6[a]	6[a]	28	16
Laboratory	No. 29	No. 30	No. 31	No. 32	No. 33	No. 34	No 35
Places	30	16	12	12	15	40	20
Laboratory	No. 36	No. 37	No. 38	No. 39			
Places	20	20	20	20			
Another facilities**	No. 1[b]	No. 2[c]	No. 3[c]	No. 4[c]			
Places	25	10	10	10			
Total number of places in laboratory: 677							
Total number of places in another facilities: 55							

Laboratories No. 1-6: Dpt. Animal Production; No. 7-11: Dpt. Animal Health; No. 12-22: Dpt. Food Hygiene and Food Technology; No. 23: Dpt. Molecular Biology; No. 24-27: Dpt. of Applied Chemistry and Physics; No. 28-30: Dpt. Biomedical Sciences; No. 31-39: Veterinary Hospital.

[a]Laboratories used mainly for research; [b]Pilot plant of Food Technology; [c]Clinical training rooms

Study and self-learning

The FVULE library occupies 475 m^2 of the main building and it has 174 places. It offers free-access reading facilities, Wi-Fi, consultation, general information, specialist information, online public access catalogues, library loans and both manual and electronic references. It has more than 44,964 books (29,266 items are located in the FVULE library and 15,698 in the departmental libraries), over 14,550 copies of journals/publications, 1,085 electronic media -CF, DVD, CD-ROM, etc.- and 17 maps/atlas; moreover, there are 421,648 electronic titles and 477,494 electronic portfolios accessible to the entire university community. Its opening hours are from 08: 00 to 20: 00.

The FVULE has two computer rooms with 22 and 25 computers, respectively, that are available to all students for self-learning. The Veterinary Faculty's library has 13 laptops that are loaned to students upon request.

Premises for skill labs:

Although the VHULE does not have a laboratory dedicated to the development of clinical skills, it has the following animal simulators:

- Dog intubation
- Blood extraction in dogs
- Foetal positioning and dystocia in cows
- Application of sperm doses in cows (old model)
- Radiography and ultrasound in dogs.

Canteen and Catering:

The ULE has two cafeterias located close to the VEE building. They are open from 8: 00 a.m. to 7: 00 p.m., offering breakfasts, snacks, and sandwiches in the morning, and a selection of various dishes for lunch from 1: 00 to 3: 45 p.m. There is also an outdoor terrace available. Vending machines are set up in the main building of the Faculty of Veterinary and in the VHULE. The main building has also a dining hall equipped with two microwaves and space for 25 people.

Lockers, toilets and showers:

The FVULE, VHULE, and Teaching Farm have changing rooms, toilets, and washing facilities on every floor of each building, and at the Faculty and Hospital, students also have access to lockers.

Staff offices and research laboratories:

The staff offices and research laboratories are distributed across the floors of the FVULE building and the VHULE building and are sufficient to meet the needs of the academic and support staff for teaching and research activities. The Dean, Vicedeans, Secretary and VHULE Director have individual offices located on the ground floor of the Faculty building and at the VHULE, respectively.

Accommodations and housing:

The University of León offers students various services (link) including those related to housing. There, students can find information about university residences, a list of available apartments through the Housing Program, and the ULE's Intergenerational Housing Program (link).

The University of León owns the San Isidoro College (link), offering 45 places and various services to users. Located in the city centre, it is well connected to the university campus by bus lines. The Vice-Rectorate for Students and Employment annually offers grants for this college for top level athletes and academically excellent students of the University of León.

On-call student accommodation:

The Hospital provides a rest and sustenance area on the ground floor, equipped with tables, chairs, a microwave, refrigerator, and bunk beds. During 12-hour shifts, sleep is permitted only if the clinical activity and duties required for the care of hospitalised animals allow it.

Leisure:

Students of the FVULE have their own leisure and sports areas on the university campus. The Sports Service of the ULE (https: //www.unileon.es/deportes/campus-de-leon) aims to promote healthy lifestyles among the university staff, including students, through regular physical activity. For this purpose, it has various facilities where different sports can be practised:

- Indoor facilities: Hansi Rodríguez Pavilion, Multipurpose Room, Fronton.
- Outdoor facilities: two indoor soccer fields, a soccer field, an athletics track, four tennis courts, two paddle courts, and a beach volleyball court.

The University of León also provides a space for cultural encounters and enrichment (https: //www.unileon.es/estudiantes/futuros-estudiantes/servicios-estudiantes), promoting access to culture not only for its students but also for the general public (https: //actividadesculturales.unileon.es/). Throughout the academic year, a broad and diverse cultural agenda is developed, including a wide variety of events and activities aimed at promoting, celebrating, and exploring different expressions and cultural manifestations. This includes everything from concerts, art exhibitions, theatre performances and dance, to lectures, workshops, and film screenings.

University of León Language Centre:

This centre is dedicated to the teaching and learning of foreign languages (German, Chinese, French, English, Italian, Portuguese, among others), for both the members of the university community and the general public. In addition to regular courses, it often provides specialised programmes, such as preparation courses for official exams, language courses for specific purposes (such as business or health), and language skill workshops. It may also offer cultural exchanges and opportunities for linguistic immersion.

Others services (https: //servicios.unileon.es/): it is worth highlighting:

University of León Bicycle Loan Program (https: //ulebici.unileon.es/): This is a free service promoted by the Regional Energy Agency of Castilla y León (EREN), in collaboration with the University of León, as part of Spain's Energy Saving and Efficiency Strategy (E4), driven by the Institute for Energy Diversification and Saving (IDAE). This program offers students, faculty, and university staff the opportunity to use bicycles for transportation, both within the university campus and in the city. The main objective is to promote an ecological and healthy means of transport, thereby reducing the dependence on motor vehicles and their environmental impact.

Photocopying service: The university campus houses a photocopying company to facilitate access to printing and copying services for students, teachers, and other staff.

Electric car chargers: In different locations, as evidence of ULE's commitment to sustainability, innovation, and support for environmentally friendly practices.

Standard 4.3: ***The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE 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
take into account environmental sustainability
be designed to enhance learning.

1. VETERINARY TEACHING HOSPITAL

The Veterinary Hospital of the ULE is a reference centre located on the university campus opposite the main building of the FVULE. With a surface area of 4,370 m2, it can accommodate enrolled students during their practical training, ensuring the best care and management procedures for patients. Its modern facilities are equipped with advanced medical and diagnostic technology and are designed to receive and treat various animal species, always ensuring their welfare.

It has a reception area that also functions as a waiting room with separate spaces for canine and feline patients. GestorVet® is the software used for medical records, billing, pharmacy control, and appointments at the VH.

The Hospital is organised as follows:

▶ Administration and maintenance area:

a) Director and Manager Office.

▶ Clinical services area:

b) Small and exotic animal units
- Reception
- Waiting room
- General consulting room for animals from shelter
- General consulting rooms
- Specialist consulting rooms
- Radiology room
- Echography room
- Endoscopy room
- Magnetic Resonance Imaging (MRI) room
- Computed Tomography (TC) room
- Hospitalisation area
  - Canine room
  - Feline room
  - Other animal rooms
  - PreUCI room
  - UCI room
- Surgical area
  - Presurgical room
  - Surgical suites

c) Equine, food production and wild animal units
- Reception
- Exploration rooms
- Hospitalisation area
  - Equine.

    - Small ruminants
  - Surgical area
    - Presurgical room
    - Surgical suites
    - UCI room.

d) Reproduction area (common to both clinical units)
  - Small ruminants and pig rooms
  - Equine room
  - Laboratories

e) Infectious diseases and necropsy area
  - Infectious diseases zone
    - Consulting room
    - Laboratory
    - Hospitalisation area

▶ Hospitalisation area:

  - Small animals, small ruminants, pigs and equine.
  - Necropsy area (not in use).

f) Support and diagnostic unit.

g) Medication reservoir.

▸ Teaching area:

h) Several rooms, offices and libraries for teaching activities.

The general consultation rooms are equipped with examination tables, a desk, and a computer connected to the management software. Some of them have an otoscope, and, as one would expect, the ophthalmology room has an ophthalmoscope.

The soft tissue operating room, emergency room, and neurology and ophthalmology operating rooms are equipped with an anaesthesia machine, gas outlet, surgical aspirator, a flexible endoscope for digestive procedures and bronchoscopies, and a microscope for these specialties. The operating room for traumatology procedures and minimally invasive surgeries is equipped with a rigid endoscopy tower (Arthrex®) that allows recording of all procedures, a monopolar and bipolar electrosurgical scalpel, and an arch for interventional radiology. All procedures are recorded and are available for review and discussion with students. There is a dentistry operating room equipped with oral radiology, an X-ray machine, and its own anaesthesia machine.

All the high-quality surgical material used in the operating rooms is cleaned and sterilised in a sterilisation room equipped with a steam and plasma autoclave.

The emergency and hospitalisation areas are prepared to handle any type of emergency: unstable patients, those hospitalised or coming from the emergency room in critical condition, who are at risk of cardiorespiratory arrest. The emergency room is equipped with a crash cart, oxygen supply, multiparametric monitor, ultrasound, gas analysis, aspiration and suction system, and materials for procedures such as peripheral catheterization, endotracheal intubation, thoracocentesis, or abdominocentesis. In the intensive care unit, which has 8 cages, an incubator, and an ICU crib, there is also equipment with oxygen supply, two multiparametric monitors, and a telemetry monitoring system, ultrasound, infusion pumps, perfusors, and an ICU mechanical ventilator. In addition, there is a fridge for blood product storage available for hospitalised patients. The hospitalisation area has 8 places for small dogs and 10 boxes for medium to large dogs, and 5 cat-friendly cages. This area is equipped with various monitoring units (ECG, PANI, SPO2), oscillometry or doppler for non-invasive arterial pressure measurement, portable devices for measuring glucose, lactate, and ketone bodies, as well as for arterial and venous blood assessment, an ultrasound scanner, a suction device for nasal or oral secretions, and several infusion pumps.

The isolation area is a completely separate room, prepared to comply with all appropriate biosecurity measures. Each accommodation, consisting of 1 large box, 1 medium cage, 2 small cages for dogs, and 2 cages for cats, is equipped with individual materials (stethoscope, thermometer, gases, etc.).

The large animals area receives equine, small ruminant, bovine, and porcine patients admitted to HVULE, and it has various consultation rooms and operating theatres. There is a room dedicated to the reception of general emergencies and consultations, outfitted with a horse stock for conducting clinical procedures. In this room, patients are also aseptically prepared for surgeries involving contamination risks. Another room is designated for musculoskeletal examination and therapy, as well as for the pre-surgical preparation of patients undergoing clean surgeries. This room is equipped with a horse stock, a storage cabinet, and a portable ultrasound machine. In the surgical area, there is an operating theatre for contaminated surgeries, where procedures for colic, wounds, castrations, and the cleaning of infected joints and tendon sheaths are performed. This area includes an adjacent padded induction box, a storage room, and a padded recovery box. The induction and recovery boxes are connected by an electric hoist for handling anaesthetised horses. The operating theatre is furnished with a surgical table, an anaesthesia machine, and all necessary surgical materials. The induction box features a containment system for patient induction, and the recovery box is padded on all walls, ensuring safe induction and recovery from general anaesthesia.

Another operating theatre is reserved for clean surgeries, where procedures such as arthroscopies, fracture treatments, and upper respiratory surgeries are conducted. This theatre is equipped with an induction box and a recovery box, similar to the aforementioned operating theatre, and additionally includes an arthroscope, fluoroscope, and protective equipment for X-ray personnel. This theatre features two cameras for viewing arthroscopy images and the surgical field, and a large window providing a panoramic view of the room. All high-quality surgical materials used in the operating theatres are cleaned and sterilised in a sterilisation room equipped with steam and plasma autoclaves.

The hospitalisation area includes a zone for healthy horses without signs of systemic disease or with diseases caused by agents with a very low potential for transmission to humans and other animals, such as musculoskeletal examinations and surgeries, diagnostic imaging procedures. This zone has 17 boxes with doors and automatic waterers. There is also an ICU and neonatal area, reserved for neonatal foals and adult horses requiring intensive care, with two ICU boxes and three ICU paddocks. All boxes are equipped with oxygen and vacuum intakes and automatic waterers. The isolation area is located in a separate part of the building and consists of 2 boxes, a central corridor, and a storage room.

Small ruminants and calves without signs of systemic disease, coming from infectious disease-free livestock farms, admitted for scheduled surgeries, are hospitalised in an area designated for these species. There are 5 boxes with galvanised iron doors, cement walls, printed concrete floors, and an automatic water bowl. There is an isolation area with boxes to accommodate patients from these species who have a history of abortions, abscesses, fever, diarrhoea, or other signs of contagious disease.

Common diagnostic services in the hospital include a:

- Diagnostic imaging room, with an ultrasound room featuring two scanners with various transducers adapted for use in both small and large animals, and a portable machine. All equipment is connected to a PACS system for subsequent image reading and storage.
- Radiography room, equipped with a digital CR radiography system and a mobile DR radiography equipment. This area is divided into two rooms, one for small animals and the other for equine patients, separated by a room where image processing is done.
- State-of-the-art magnetic resonance imaging room.
- Small animal induction area, where animals are pre-medicated and induced before entering the operating room and where all dirty procedures such as wounds and colonoscopies are performed. This area is equipped with an anaesthesia machine for invasive and non-invasive cardiovascular monitoring, respiratory monitoring, assisted and controlled breathing, thermal

blankets, fully intravenous and inhalation anaesthesia, residual anaesthetic gas extractors, perfusors, infusion pumps, neuromuscular monitoring, etc.

- Small animal recovery room: room with 5 cages for animals undergoing ambulatory surgeries and that do not require ICU care.
- Large animal induction and recovery rooms: previously described.
- Central inventory and dispensary area, organisation and storage of general materials and medications used in the VHULE as part of clinical procedures and prescribed therapies delivered to VHULE veterinarians.
- Pathological Anatomy Service: includes a reception room, a laboratory for sample processing, and a necropsy room equipped with tables and refrigeration and freezing chambers
- Reproduction service, equipped for gamete preservation with straw identification and marking machine; embryo micromanipulator with inverted microscope; binocular loupes; sperm motility analysis system; automated biofreezer; liquid nitrogen thermos; spectrophotometer; centrifuges; thermic control plates; ultrasonic straw sealer, etc.
- Clinical pathology laboratory, for haematology, biochemistry, basic microbiology, and immunofluorescence analysis.

Furthermore, the following clinical support services are located in the main building of the facilities: histopathology laboratory, including immunohistochemical methods for the main animal diseases; parasitology, microbiology, including bacteriological culture and PCR methods, serology, molecular genetics (parenthood, hereditary diseases carriers, and avian sex determinations), pharmacology and toxicology, and analysis of raw materials for foodstuffs.

2. TEACHING FARM

The University of León boasts a farm spanning 130,000 m^2, situated a mere 1.5 km from the FVULE. This facility comprises several buildings dedicated to housing various animal species: bovines (with a capacity of 50 heads), ovines (accommodating up to 400 individuals), and swine (housing for 60 sows and their growing piglets –around 440-). Additionally, there is a structure designated for the isolation of ill animals and another for storing feed and machinery for animal care. The farm also includes a building with six boxes for stallion housing and twelve prefabricated wooden boxes for mare accommodation. The central building, covering 300 m^2, comprises offices, two laboratories, a lecture room for 27 students, changing facilities, and lavatories. Whilst the University is the owner of the farm, it is operated by a private company, EVOLUTION IBÉRICA XY, S.L.

At the University farm, a multitude of practical sessions are conducted for various courses within the Veterinary Science Degree, belonging to modules in Clinical Sciences and Animal Health, as well as Animal Production. These include:

- Introduction to the Veterinary Profession
- Ethology and Animal Behaviour
- Clinical Propaedeutics
- Reproduction and Obstetrics Basis
- Animal Breeding and Improvement
- Animal Production and Veterinary Hygiene
- Obstetric and Reproductive Pathology
- Preventive Medicine, Health Policy, and Zoonoses
- Animal Production and Health Rotation
- Clinical Rotation

3. FOOD PILOT PLANT

At the main building of the Faculty, there is a pilot plant for food processing and manufacture of cheeses and sausage (FPP), among others. It also keeps close relationships with some food processing

companies, mainly through the Department of Hygiene and Food Technology, in order to carry out practices and technical visits.

The pilot plant is situated on the ground floor (Department of Food Hygiene and Food Technology), with a usable area of 200 m² (see the attached map). It includes the following food production lines:

- Dairy products: milk curd, cheeses, butter, yoghourt
- Meat products: sausages, both cooked and cured; other cooked meats
- Canned vegetables
- Alcoholic beverages
- The equipment comprises:
- Equipment for ultra-filtering of foodstuffs
- Modified and/or controlled atmosphere packaging machine
- Equipment for cheese making: storage tank, plate pasteurizer, cheese vat, mechanical press, molds…
- Equipment for the production of raw-cured sausages and cooked meats: mincer, mixer, kneader, cutter, sausage filler, marmite, oven...

At the Food Science and Technology Institute (ICTAL), an affiliate research institute of ULE (https: //ictal.unileon.es/), there exists an additional food manufacturing facility (FPP-ICTAL). This plant includes a production line for bakery, pastry, and confectionery goods, alongside others for dairy products (cheese, yoghourt, ice cream), and for meat products. Students enrolled in the Veterinary Science degree programme have the opportunity to undertake practical training and complete their Final Degree Project within these facilities, particularly in areas related to Veterinary Public Health (food safety and quality). The Food Pilot Plant available at is equipped with the following material:

- For microbiological analysis: a Mass Spectrometer with MALDI source and a Time-of-Flight (TOF) analyser with reflector, BAX Real Time-PCR system, PCR; Electrophoresis, Microscopy, Immunomagnetic Separation, ISO-GRID Filtration Unit; BIOLOG Microbial Identification System; Bioscreen; Turbidimeter; Microtiter Plate Readers; Incubation Ovens; Anaerobic Cultivation; Spiral Plater.
- For physicochemical analysis: Soxhlet Fat Extraction, Kjeldahl Protein Analysis, High-Performance Liquid Chromatography (HPLC), Gas Chromatography, Near-Infrared Spectroscopy (NIR), Sensory Analysis, Texture Analyser, Rheometer-Viscometer, Colorimeter, Standardised Tasting Room.
- For food manufacturing: Pilot Plant Equipment for High Hydrostatic Pressures (capacity 2.5 l, maximum pressure 900 MPa), UV Ray Booth, Ultraviolet Crosslinkers (UVP), Non-Thermal Atmospheric Plasma Generation Equipment, OMVE CP 121.

Both facilities (FPP-FVULE and FPP-ICTAL) are utilised for practical teaching in the Food Technology module of the Veterinary Degree, as well as in various subjects of the Food Science and Technology Degree.

4. ANIMAL HOUSE

The Animal House (http: //servicios.unileon.es/animalario/) of the University of León, located in front of the Faculty main building, is the Administrative Entity (with the rank of General Research Service, depending from the Vice Rectorate of Research) that groups the buildings, facilities and staff specially attached to animal research, which do not specifically belong to the Departments for the discharge of their duties. The facilities and equipment available in the Animal House are:

A.1. Area of rodents and lagomorphs: lodging (13 rooms), quarantine (2 rooms), services (2 warehouses and 1 laboratory) and cleaning (3 rooms).

A.2. General purpose and fish farming: 2 large rooms, 4 medium-sized rooms, 4 small rooms and 1 warehouse.

At present, these premises are not used for teaching in the Veterinary Degree, but they are used for research purposes.

4. SLAUGHTERHOUSE

Obviously, the Faculty does not have a slaughterhouse, but has easy access to the slaughterhouse owned by Carracedo-Llamas S.L. (a private company) since 2009 (former Municipal slaughterhouse owned by the Local Authority of León). The slaughterhouse is homologated and duly authorised for the intra-European commerce of meat, with the health register number 10.06981/LE.

This slaughterhouse is in the outskirts of the city, about 5 km away from the Faculty and has a surface of 22,000 m^2 (the main building, the cutting plant and the cold storage room occupy 5,000 m^2). The practice and sampling for the teaching activities and the non-regulated practices of the students in the summer holidays take place in this slaughterhouse.

For the slaughter and processing of animals there is a line for bovine/equine. The number of slaughtered animals in the year 2022 was 168,039 bovine and small ruminants. It has a cold store and a cleaning and disinfection centre. At present, there are 16 full time and 4 part time employees.

The main facilities of the slaughterhouse include:

- Stables to accommodate the animals scheduled for slaughter each day
- A partially mechanised slaughtering room
- A room for processing offals, viscera, and similar by-products
- Five refrigeration chambers
- One freezing tunnel
- Two freezing chambers
- A cutting room

Apart from these, there are other premises for the waste water depuration, cleaning and disinfection of vehicles, animal by-products not intended for human consumption treatment, stores, offices, coffee room, etc.

The official inspection is carried out by two Veterinarians of the regional government (Junta de Castilla y León), who may be assisted by another Veterinarian of the slaughterhouse.

Standard 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 VEE must unequivocally demonstrate that the standard of education and clinical research is compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by teaching 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 VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceed the best available clinics in the private sector.
The VTH and any hospitals, practices and facilities which are involved with the core curriculum must be compliant with the ESEVT Standards and meet the relevant national Veterinary Practice Standards.

Description of the organisation and management of the VTH and ambulatory clinic

The VHULE is open to companion animals and horses year-round (24/365). Emergencies are run by specialist personnel made up of academics and veterinarians who have been specifically hired for the VHULE. Any intervention carried out by the students is overseen by the hospital's professionals and teachers.

The clinical practical training with farm animals (cattle, sheep, goats and pigs) is conducted on an ambulatory basis mostly, although they can also be treated at the VHULE. Students participate in this

practical training under the supervision of a teacher. During the practical training, the students take part in the service as normal clinical practice.

The general and specialist clinics for small animals include internal medicine, pre-anaesthesia consultation, surgery, dermatology, reproduction, ophthalmology, gastroenterology, cardiorespiratory, nephro-urology, traumatology, orthopaedics, and neurosurgery, oncology, regenerative medicine and cellular therapy, intensive care and hospitalisation (24/365), isolation for infectious animals.

The general and specialist clinics for large animals include internal medicine, podiatry, imaging diagnosis, anaesthesiology, surgery, reproduction, traumatology, orthopaedics, and neurosurgery, intensive care and hospitalisation (365/24), isolation for infectious animals.

Internal medicine service includes initial opinion and speciality consultations. Surgery service includes consultations and surgical procedures for soft tissues, and orthopaedics.

Dermatology service includes consultations, diagnostic and minimally invasive treatment methods.

Reproduction service includes speciality consultations, diagnostic and therapeutic procedures and assisted reproduction techniques.

Ophthalmology service includes consultations and surgical treatments.

Traumatology, orthopaedics, and neurosurgery services include the study and treatment of congenital or acquired neurological injuries and musculoskeletal disorders (muscles, bones, joints, etc.), ranging from young animals to geriatrics.

Oncology includes consultations, diagnostic methods and treatments. The general and specialist clinics for horses are similar.

Shared diagnostic services include digital radiography, ultrasound, endoscopy, state-of-the-art magnetic resonance imaging, and computed axial tomography (CAT).

Genomic diagnosis and therapy service includes tests for animal parentage/identification, sex determination in birds, and diagnosis of hereditary diseases.

Cellular therapy service includes treatments for injuries using mesenchymal stem cells extracted from the patient themselves.

The groups of students that carry out the clinical practice vary in size between 2 and 7. This allows each student to intervene directly on the patient under the supervision of a teacher. For each activity the number of students is governed by the clinical scenario and the handling procedures.

All the specialists and professors at the VHULE are collegiate members of the Official College of Veterinarians of León and adhere to the ethical code for the veterinary profession, as established by the General Council of Official Colleges of Veterinarians of Spain (https://colvetcyl.es/). Most clinical professors and VTH vets belong to a range of professional associations (AVEPA: The Spanish Association of Veterinary Specialists in Small Animals; AVEE: The Association of Veterinary Specialists in Horses; SECIVE: Spanish Veterinary Surgery Society; Equine Clinic Spanish Certificate, Fear Free Pets Certification), which ensures that they undergo continuous training and clinical improvement. Moreover, some professors at the VTH are European Diplomates in different specialities of the veterinary clinical practice: ECVPH (European College of Veterinary Public Health), ECAR (European College of Animal Reproduction).

Standard 4.5: ***The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgeries and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.***

Description of how all students can have access to all relevant facilities

The students have access to diagnostic and therapeutic facilities such as diagnostic imaging, anaesthesia, clinical pathology, pharmacy, intensive and critical care, surgeries, and treatment facilities of the VHULE during the clinical practical training in the 4th and 5th year, although in the 1st year they already perform eight hours of regulated practices in the subject of Introduction to the Veterinary Profession. Necropsy facilities are open to students from the 2nd year onwards (curricular practical sessions for necropsy studies take place in the subject “General Pathological Anatomy”), and then students attend clinical case necropsies or carcass examinations during their training in the VHULE in the 4th and 5th year. Students are allowed to work with the clinical records in the VHULE databases during their 4th and 5th years.

The hospital develops a voluntary program for student collaborators, as extracurricular practices, both in the service of small and large animal medicine and surgery for students from the 3rd to 5th year, and in the equine neonatology service from the 1st to 3rd year

For the farm animal medicine, in the ambulatory clinic programme, students perform practices in the 4th and 5th year.

At the facilities of the Faculty and the Veterinary Hospital, students can enhance their communication skills through teacher-student interactions and the utilisation of specific teaching methodologies. For instance, during their first year, in subjects such as "Anatomy," "Cytology and Histology," and "Physiology," as well as in their second year in the subject of "Veterinary Pharmacology," students are tasked with completing projects on specific topics. These projects are presented in poster format and showcased in sessions that resemble scientific congresses. Likewise, during the 5th year, in the "Rotating Animal Production and Health”, they work through roundtable presentations and discussions.

Standard 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 the prevention of the spread of infectious agents, animal care and student training. They must be adapted to all animal species commonly handled in the VTH. When permanent isolation facilities are not available in any of the facilities used for clinical training, the ability to provide such facilities and the procedures to use them appropriately in an emergency must be demonstrated during the visitation.***

Description (number, size, species, ...) of the premises for housing isolated animals

There are facilities for holding animals in isolation at the Veterinary Teaching Hospital (VHULE), the University Teaching Farm (TFULE) and the Animal Experimentation Service (SAEX):

VHULE

SPECIES	COMMENTS
Dogs	Hospitalisation room for infectious dogs with five cages
Cats	Hospitalisation room for infectious cats with five cages
Horses	Two boxes isolated from each other, with glazing in the doors

TFULE

SPECIES	COMMENTS
Cows	One enclosed cattle shed
Small ruminants	Two enclosed sheds

SAEX

SPECIES	COMMENTS
Rodents, rabbits	Two quarantine rooms. Before entering the facilities the animals should be quarantined; they are theoretically healthy animals
Aquatic species	One aquatic system for quarantining before entering the experimental system

Standard 4.7: ***The VEE must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under the supervision of teaching staff.***

Description of how and by whom field veterinary medicine and Herd Health Management are taught to all students

The ambulatory clinic takes place on private farms outside the VHFVULE. These farms house various types of production animals (dairy or beef cattle, dairy or meat sheep, swine, poultry, rabbit breeding), with the majority of them being intensive breeding system farms located in the province of León. They are organised by the external practice committee of the FVULE, and currently, 11 veterinarians contracted by the University of León participate in the "Support for External Practice in Livestock Animals at the Faculty of Veterinary" programme, which has been ongoing since 2011.

Two of these veterinarians handle equine medicine cases, primarily in the provinces of Valladolid and Zamora.

The students accompany this teaching staff. Students wear their own work attire, although gloves, rectal examination gloves, and coveralls are provided.

The clinical activity takes place from September to June, throughout the academic year. Students accompany this teaching staff in their daily clinical activities, which may involve individual and/or collective cases, in groups ranging from 1 student per teacher to up to 4 in poultry and rabbit breeding. Collective cases are considered herd health management. These activities include emergencies that may arise during the routine clinical work of each veterinarian.

The vehicles used for the ambulatory clinic belong to the contracted veterinarians. All vehicles are equipped with the necessary tools for animal identification (electronic identifier readers), sample collection (analytical equipment), conducting animal examinations (examination materials), as well as surgical material. The vehicles also have mobile ultrasound scanners used for disease diagnosis and particularly for pregnancy diagnosis, as well as insemination and sperm doses storage equipment.

The reports prepared by the students are supervised by the professors responsible for the subjects that include this activity in the clinical training of 4th and 5th-year students (in the subjects “Medical Pathology I”, “Infectious Diseases I” and “Infectious Diseases II”, “Parasitic Diseases”, “Obstetric and Reproductive Pathology” and “Clinical Rotation”).

Standard 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 animal welfare, and to prevent the spread of infectious agents.***

Through the education chapter of ULE, the FVULE can contract a bus company (ALSA) for the transportation of students to the Teaching Farm and the slaughterhouse, as well as for extramural visits conducted to other companies during their practical training.

There are also two vans for the transportation of live animals (mainly horses), although usually owners transport their patients.

Regarding the transportation of cadavers and material of animal origin, the University of León has an agreement with a destruction and cremation plant, REBISA, which periodically collects the stored stuff. There is a minimum of one collection per week.

As regards the collection and destruction of fluids, these are collected and temporarily stored in special containers made of high-density polyethylene, of 60, 30, 10, 4 and 1 litres of capacity, which are periodically collected by the company CONSENSUR, S.A. to be sterilised and destroyed.

As for the management of chemicals and other biological residues, all laboratories have containers for the disposal of different kinds of chemical and biological residues. When these containers are full, they are sent to a waste storage room located between the Faculties of Veterinary and Law. The residues are identified and labelled according to their nature and each 20-30 days they are collected by an external company specialised on the management of residues (BIOTRAN). The waste management is registered (laboratory, quantity, date).

***Standard 4.9**: Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted (in different languages if the curriculum is taught in them) for students, staff and visitors and a biosecurity manual must be developed and made easily available for all relevant persons. The VEE must demonstrate a clear commitment for the delivery and the implementation of biosecurity, e.g. by a specific committee structure. The VEE must have a system of QA to monitor and assure clinical, laboratory and farm services, including regular monitoring of the feedback from students, staff and clients.*

The ULE has a specific department for biosecurity and health protection within the Risk Prevention Service (link). This Service, in collaboration with other local institutions, departments, and university services, and with the participation of all FVULE employees, both teaching and research staff as well as support personnel, undertakes activities that lead to the creation of a healthy and safe environment. There are manuals and procedures for the prevention of occupational hazards. This service is responsible for conducting risk assessments in each department/service and consequently determines the steps or procedures to be taken as needed. The FVULE's Biosecurity Plan, which includes the necessary safety measures to reduce risk in all teaching and care activities, can be accessed at the web page (link).

Comments on Area 4

The FVULE is the most complex infrastructure within the ULE due to its extension and the challenge of managing three main infrastructures. However, the Faculty's capacity is limited in many respects as competencies are either centralised (University) or decentralised (Departments). The primary role of the Faculty is to harmonise and meet needs while promoting improvement in pursuit of the highest international standards.

Significant changes have been made to the facilities and equipment since the last EAEVE visit, as mentioned in various sections of the SER. Nonetheless, continuous improvement of facilities remains an active objective to ensure high-quality teaching and research activities.

The Veterinary Teaching Hospital (VHULE) was opened in 2009, and its facilities are suitable for providing practical education to undergraduate and postgraduate students. Its structure facilitates teaching across different species and specialties. In the past three years, the facilities have undergone substantial improvements, and new clinical equipment has been incorporated.

In general, the facilities and equipment are up-to-date and suitable for the delivery of the Veterinary Curriculum. Classrooms and laboratories are being renovated, and equipment is regularly updated, with student needs actively assessed and considered. Agreements with external farms and ambulatory services have ensured training in these areas without the need for intramural facilities to deliver these learning opportunities.

Suggestions for improvement in Area 4

In special projects for the renovation or acquisition of teaching equipment, the departments combine their requests with those of the FVULE due to the high costs of some of them. The decision is reached by consensus in meetings involving the Dean and the Heads of Departments and is then submitted to the Vice-Rector for Infrastructure and Campus.

We aim to continue expanding the variety and number of animal simulators. By the end of 2024, we plan to incorporate the equine simulator for blood collection, intramuscular injection in the neck area, rectal palpation, palpation of the reproductive tract, and palpation of the distended intestine. We hope to compete in new calls from the Rector's Office for the acquisition of other models.

Urgent improvements are needed in the FVULE Food Pilot Plant both in terms of construction aspects and the renewal of teaching equipment.

AREA 5. ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN

AREA 5. ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN

Standard 5.1: The number and variety of healthy and diseased animals, first opinion and referral cases, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training in all relevant areas 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.

Description of the global strategy of the VEE about the use of animals and material of animal origin for the acquisition by each student of Day One Competences

As stated in the official document of the Degree in Veterinary Medicine (ORDEN ECI/333/2008), the FVULE must ensure the correct training of veterinary students to guarantee that they acquire the Day One Competencies necessary to enter the veterinary profession, following the standards established by the Faculty's Quality Assurance System, accredited both by ACSUCYL (member of ENQA) and the EU Directives 2005/36 and 2013/55.

In order to achieve proper preclinical and clinical training, the FVULE has an adequate number of animals and animal materials, ensuring their use complies with animal health and welfare standards. The FVULE recognises and values the 3R principles of Reduction, Replacement, and Refinement. In terms of replacement, the Rectorate's renewing plans for teaching materials have led to the acquisition of several alternative teaching resources, which could increase in the medium to long term if these plans continue.

Preclinical training involving the pathological analysis of samples and materials of animal origin is conducted in specific rooms and laboratories equipped with the necessary instrumentation, enabling students to process cadaver and tissue samples, faecal samples, etc., for diagnostic purposes (Table 5.1.1 and Table 5.1.6).

Materials for preclinical training are mainly provided through agreements with external entities, including external farms, state public health facilities, regional abattoirs, public and private kennels, and stray dog and cat associations. Training with healthy animals (Table 5.1.2) is provided at the VHULE, as well as during visits to extramural entities. Clinical training is primarily supported by the Veterinary Teaching Hospital (VHULE), focusing mainly on maintaining or increasing caseload in small and large animal areas and correcting possible imbalances between different animal species. The VHULE has a Small Animal Clinical Area that offers general and specialised consultations by appointment every working day from 9: 00 to 20: 00 hours. There are specialised consultations for Internal Medicine, Ophthalmology, Dermatology, Digestive, Cardiorespiratory, Oncology, Diagnostic Imaging, Exotic Animals, Nephrology, Reproduction, Soft Tissue Surgery, Neurosurgery, Traumatology, and Orthopaedics. There is a specific examination room for feline consultations. Additionally, there is a 24-hour Emergency and Hospitalisation Service, 7 days a week, open all year round. To increase the number and diversity of clinical cases, the VHULE collaborates with animal shelters, the Red Cross, and León City Council. With the latter, it participates in the Trap-Neuter-Return programme to control stray cat colonies.

The Large Animal Clinical Area focuses mainly on Equine Medicine, Surgery, and Reproduction, available for consultation by appointment (from 9: 00 to 20: 00 hours) on weekdays throughout the year. Ruminants and porcines are also admitted, although the number of admissions is small. In addition, there is a 24-hour emergency and in-patient service, 365 days a year. Student exposure to farm animal medicine is primarily obtained through the Outpatient Clinic Unit, coordinated by the Dean's Office of VEE, with 11 clinical veterinarians employed by the Rectorate in the “Support for external farm animal practices at FVULE programme”.

The use of animals for experimental and educational purposes is regulated by RD 53/2013 (transposition of Directive 2010/63/EU on the protection of animals used for scientific purposes).

Therefore, all procedures must be approved by the institutional Animal Welfare and Ethics Committee and finally by the competent authority (link). Such approval requires the application of the 3R concept of reducing the number of animals used, refining the procedures used, and replacing them with alternative methods. Procedures below the threshold, such as those involving moderate animal handling (e.g., basic physical examination), are exempted. Currently, the majority of clinical teaching procedures are performed at VHULE on client-owned patients, and the number of practical activities with experimental animals has been significantly reduced.

During practical anatomy sessions, students work directly on anatomical specimens or dissect whole-body cadavers (mainly dogs) (Table 5.1.1). Dog cadavers are embalmed by specialised personnel in the dissection room using an embalming solution with a minimal amount of formalin. When studying dog dissections, students are divided into small groups of 5, each group working at one of the dissection tables. This ensures that toxic exposure levels are kept below those permitted by European regulations. Anatomy students also use some mounted skeletons (horse, dog, vulture, ostrich, and snake) or parts of them for learning.

Carcasses and samples for practical sessions of Anatomical Pathology (Table 5.1.1) come from slaughterhouses, VHULE, farms, and private veterinarians who send the material for post-mortem diagnosis. Necropsies are performed as soon as the carcass arrives and, if necessary, are kept cold. The biological material used in Anatomical and Pathological Anatomy practices is disposed of by an external company, responsible for its collection and incineration (REBISA, Biological Recycling of Agricultural By-Products S.A.).

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

Species and specimens	2022-2023	2021-2022	2020-2021	Mean
CATTLE				
nº cervical vertebrae	55	53	53	53
nº thoracic vertebrae	27	27	27	27
nº lumbar vertebrae	27	27	25	26
nº sacrum	7	6	6	6
nº caudal vertebrae	15	15	15	15
nº scapulae	22	19	19	19
nº humerus	20	17	17	17
nº radius-ulna	14	14	14	14
nº sets carpal, metacarpal and phalanx bones	8	8	8	8
nº pelvis	7	7	7	7
nº femur	15	15	13	14
nº tibia/fibula	18	18	17	18
nº sets tarsal, metatarsal and phalanx bones	7	7	7	7
nº carpal-metacarpal-phalanx-joint	2	2	2	2
nº skulls	20	18	17	19
nº mandibles	57	55	55	55
nº heads – paramedian	2	2	2	2
nº hyoid apparatus	3	3	3	3
nº complete skeletons	1	1	1	1
nº hearts	16	16	16	16
nº lungs	6	6	6	6
nº livers	4	4	3	3
nº kidneys	10	10	10	10
nº spleens	9	9	9	9
nº stomachs	3	2	2	2
nº sets tongue – hyoids- larynx	8	8	8	8

nº female reproductive apparatus	12	8	8	9
nº testicles	10	10	10	10
nº penis	7	7	7	7
SMALL RUMINANTS				
nº sets of vertebrae	3	3	3	3
nº sacrum	2	2	2	2
nº scapulae	3	3	3	3
nº humerus	3	3	3	3
nº radius-ulna	3	3	3	3
nº pelvis	1	1	1	1
nº femur	2	2	2	2
nº skulls	8	7	7	7
nº mandibles	6	6	6	6
nº complete skeleton	2	2	2	2
nº brains	8	7	7	7
nº hearts	32	30	28	30
nº lungs	14	14	14	14
nº livers	8	6	6	6
nº kidneys	10	10	10	10
nº spleens	12	12	12	12
nº stomach	7	7	7	7
nº sets tongue – hyoids- larynx	12	11	11	11
nº female reproductive apparatus	27	25	25	25
nº penis	3	3	3	3
PIG				
nº scapulae	2	2	2	2
nº skulls	7	7	7	7
nº mandibles	12	12	12	12
nº complete skeleton	1	1	1	1
nº hearts	5	5	5	5
nº lungs	8	8	8	8
nº livers	11	10	10	10
nº kidneys	13	13	13	13
nº spleens	14	12	12	12
nº stomach	10	10	10	10
nº sets tongue – hyoids- larynx	8	8	8	8
nº female reproductive apparatus	9	9	9	9
nº testicles	14	12	12	12
nº penis	4	4	4	4
COMPANION ANIMALS				
nº sets of dog cervical vertebrae	2	2	2	2
nº sets of vertebrae	8	8	8	8
nº sacrum	3	3	3	3
nº scapulae	14	14	14	14
nº humerus	15	15	15	15
nº radius-ulna	11	11	11	11
nº sets carpal, metacarpal and phalanx bones	2	2	2	2
nº sets tarsal, metatarsal and phalanx bones	5	5	5	5
nº joints (dog)	3	3	2	3
nº dog skeleton	2	2	2	2
nº cat skeleton	2	2	2	2
nº dog skulls	11	11	11	11
nº dog mandibles	24	24	24	24
nº hyoid apparatus	2	2	2	2

nº dog cadavers	18	15	15	16
nº thoracic limbs (dog)	2	2	2	2
nº hind limbs (dog)	2	2	2	2
nº hearts	16	16	16	16
nº lungs	13	13	13	13
nº livers	11	11	11	11
nº spleens	12	12	12	12
nº stomach	17	17	171	7
nº sets tongue – hyoids- larynx	11	11	11	11
nº kidneys (pairs)	26	26	26	26
nº female reproductive apparatus	14	14	14	14
nº testicles	20	20	20	20
nº penis	12	12	121	2
nº brains	8	8	8	8
nº eyes	8	8	8	8
EQUINES				
nº cervical vertebrae	64	64	64	64
nº thoracic vertebrae	45	45	45	45
nº lumbar vertebrae	43	43	43	43
nº sacrum	12	12	12	12
nº caudal vertebrae	14	14	14	14
nº scapulae	25	25	25	25
nº humerus	18	18	18	18
nº radius-ulna	9	9	9	9
nº sets carpal, metacarpal and phalanx bones	5	5	5	5
nº pelvis	15	15	15	15
nº femur	21	21	21	21
nº tibia/fibula	13	13	13	13
nº sets tarsal, metatarsal and phalanx bones	5	5	5	5
nº scapula-humeral joints	1	1	1	1
nº humero-radio-cubital joints	6	6	6	6
nº carpal joints	4	4	4	4
nº femoro-tibio-patellar joints	10	10	10	10
nº carpal-metacarpal-phalanx-joint	10	10	10	10
nº skulls	16	16	16	16
nº mandibles	19	19	19	18
nº heads – paramedian	8	8	8	8
nº hyoid apparatus	3	3	3	3
nº complete skeletons	2	2	2	2
nº brains	3	3	3	3
nº lungs	7	7	7	7
nº livers	6	6	6	
nº kidneys (pairs)	9	9	9	9
nº spleens	8	8	8	8
nº stomachs	9	9	9	9
nº sets tongue – hyoids- larynx	9	8	8	8
nº female reproductive apparatus	5	5	5	5
nº testicles	8	8	8	8
nº penis	6	6	6	6
nº eyes	8	8	8	8
POULTRY & RABBITS				
nº avian skeletons	1	1	1	1
nº rabbit skeleton	1	1	1	1
nº avian cadavers	5	5	5	5

EXOTIC PETS				
nº rat cadavers	8	8	8	8
nº guinea pig cadavers	4	4	4	4
OTHERS				
nº bear skeleton	1	1	1	1
nº ostrich skeleton	1	1	1	1
nº ostrich pelvic limbs	2	2	2	2

Table 5.1.2. Healthy live animals used for pre-clinical training

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	8	8	6	7.3
Small ruminants				
Pigs				
Companion animals *Beagle dog*	8	8	8	8
Equine	2	2	2	2
Poultry and rabbits *Columba livia* *Common kestrel* *Nymphicus hollandicus* *Oryctolagus cuniculus*	16 1 15	16 1 15	17 2 15	16.3
Aquatic animals (*semiaquatic turtles)*	1	1	1	1
Exotic pets (*specify*) *Corn snake ophidians* *Bearded dragons* *Leopard geckos* *Iguana iguana*	7 2 2 2 1	6 2 2 2	6 2 2 2	6.3
Others (*specify*) *Mus musculus* *Rattus norvegicus albinus* *Guinea pigs* *Mustela putorius furo* *Cavia porcellus* *Cricetus cricetus* *Petaurus breviceps*	129 102 16 4 1 2 2 2	80 52 16 4 2 2 2 2	79 52 16 4 1 2 2 2	96

All students participate in clinical activities at the hospital, the teaching farm of ULE (TFULE), and the ambulatory clinic. The volume of intramural cases handled at the VHULE is adequate to ensure that students receive sufficient practical training to develop Day One clinical competencies (see Table 5.1.3), also are acquired extramurally (refer to Table 5.1.4) through the ambulatory clinic and the TFULE. These Day One clinical competencies from farm animals, as well as intramurally at the TFULE (refer to Table 5.1.3b), are also acquired extramurally (refer to Table 5.1.4). The average proportion of first opinion cases in small animals is approximately 90.6%, 80.7% in equine, and 100% in ruminants, exotic pets, and others (as detailed in Table 5.1.5), which equips students with the essential clinical knowledge for their initial days in the profession.

The VHULE also serves as a referral centre for professionals in the region and beyond, particularly in advanced surgical procedures and diagnostic imaging. This facilitates the introduction of students into specialised areas. The VHULE is a reference centre in diagnostic imaging, including ultrasonography, endoscopy, echocardiography, computed tomography, and magnetic resonance imaging.

The balance between acute and chronic cases is highly changeable and differs depending on the animal species. In companion animals, with increasing lifetime care, the percentage of chronic cases is higher, reaching about 80 %. For large animals, especially horses, acute problems are more frequent, the chronic ones being only about 35 %.

Regarding the number of clinical cases hospitalised for at least one day, the percentage in companion animals is approximately 10 %, while in horses this figure reaches almost 35 %. Finally, 95 % of the clinical activity of the VHULE is focused on individual treatments, as herd medicine is carried out in the farm teaching and the ambulatory clinic. Some VHULE services receive numerous samples from the outpatient clinic and other food animal veterinarians to aid in the diagnosis of herd issues.

As shown in Table 5.1.4, the post-pandemic period of COVID-19 has impacted the feasibility of visiting farms. Consequently, during the year 2020-21 and the first semester of the year 2021-2022, some farms did not permit visits, and the practical training in food animal medicine had to be conducted at the Farm-ULE.

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

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	6	2	0	2.7
Small ruminants	12	8	21	13.7
Pigs	4	0	0	1.3
Companion animals	6,376	4,896	4,036	5,102.7
Equine	266	299	208	257.7
Poultry and rabbits	11	8	5	8
Aquatic animals	34	14	24	24
Exotic pets	10	5	8	7.7
Others (*specify*) (*birds, squirrels, bats, hedgehogs…)*	586	756	504	615.3

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

Table 5.1.3b. Number of patients* seen intra-murally (in the TFULE)

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	63	63	63	63
Small ruminants	495	495	495	495
Pigs*	45	45	45	45

** The staff of the Reproduction Service of the Veterinary Hospital, accompanied by the students on placement, travel to the teaching farm to perform artificial insemination and conduct pregnancy diagnoses for all cows (43 females/academic year) and attend to a clinical case; identification (45 females/academic year) and artificial insemination on the replacement ewes (45 females/academic year) and conduct pregnancy diagnoses for all the ewes in production (450 females/academic year); artificial insemination (45 females/academic year) and pregnancy diagnosis (45 females/academic year) in sows.*

To complete the clinical and pre-clinical training, there are anatomical collections, anatomical models, mannequins (intubation and venipuncture, artificial insemination simulator in cattle, cattle dystocia simulator, radiography and ultrasound simulator).

The collaborating veterinarians at the outpatient clinic are accountable for a census of 25,700 cows, of which 22,050 are dairy; 53,500 sheep, with 48,150 dairy animals; 100 dairy goats; around 8,000 horses; approximately 350 breeding sows and 550 growing pigs; 3,200 breeding rabbits and 102,400 growing kittens; as well as 240,000 broilers.

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

Species	2022-2023	2021-2022	2020-2021*	Mean
Cattle	10,292	5,730	779	5,600
Small ruminants	18,572	9,527	687	9,760
Pigs	73	81	56	85
Companion animals	48	47	14	36.3
Equine	41	35	28	34.7
Poultry and rabbits	431	416		282.3
Aquatic animals				
Exotic pets				
Others $^{+}$*Búfalo* (*Bison Bison*) $^{++}$*Alpaca* (*Vicugna pacos*)	1^{++}	2^{+}		1

** In the period immediately following the Covid-19 pandemic, during the academic year 2020-2021 and the first semester of the 2021-2022 academic year, due to biosecurity measures, the ambulatory clinic practices were conducted at the University of León's farm, rather than on external farms.*

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

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

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	100	100	100	100
Small ruminants	100	100	100	100
Pigs	100	100	100	100
Companion animals	87.64	92.28	91.77	90.6
Equine	77.44	80.94	83.65	80.7
Poultry and rabbits	100	100	100	100
Aquatic animals	100	100	100	100
Exotic pets	100	100	100	100
Others (specify)	100	100	100	100

The training on livestock farms covers not only the EPT activities (as detailed in point 5.2) but also sessions conducted in the second semester of the 1st year, within the Introduction to the Veterinary Profession subject, and in the 3rd year, in the Animal Breeding and Improvement, Animal Nutrition and Animal Production and Veterinary Hygiene subjects. During these subjects, students visit livestock farms and participate in practical training at the VTF, allowing them to become acquainted with various production systems and their management.

Table 5.1.6. Cadavers used in necropsy

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	69	67	79	71.6
Small ruminants	80	76	138	98
Pigs	75	123	77	91.6
Companion animals	210	179	286	225
Equine	16	16	26	19.3
Poultry & rabbits	237	180	242	219.6
Aquatic animals	26	2		9.3
Exotic pets	1	3	5	3
Others (*specify*)	0	1*	9**	3.3

**Hedgehogs (Erinaceinae)*

***Wolf (Canis lupus), 2 minks (Neovison vison), badger (Meles meles), 3 bears (Ursus arctos), marten (Martes martes), tortoise (Testudines).*

Training in slaughterhouses and other food processing establishments is provided both intramurally and extramurally (as outlined in point 5.2), as a part of the EPT itineraries. Additionally, the Food Pilot Plant located in the FVULE (FPP) offers hands-on training opportunities to students. Furthermore, students engage in practical activities at various establishments inspected by the Official Public Health Services of Castilla y León.

The determination of the number of animals utilised in pre-clinical training and various courses is the responsibility of the Departments. A crucial factor is ensuring that the number of animals is sufficient to fulfil the requirements of the Spanish transposition of the Animal Protection Directive 2010/63/EU.

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

Species	2022-2023	2021-2022	2020-2021	Mean
Cattle	115	150	115	126.7
Small ruminants	130	100	150	126.7
Pigs	25	40	10	25.0
Equine	40	20	20	26.7
Poultry	55	55	60	56.7
Rabbits	10	20	35	21.7
Aquatic animals	0	5	25	10.0
Exotic pets				
Others (specify)	40	35	40	38.3

The number of visits to slaughterhouses (except for poultry), the FPP, and establishments with Official Public Health Services (PH-OVS) (Table 5.1.8) has been calculated taking into account:

- The number of enrolled students (academic year 2020-2021: 102, 108, and 102; academic year 2021-2022: 89, 88, 95; academic year 2022-2023: 97, 94, and 87, respectively, for Hygiene Inspection and Food Safety -HISA-, Rotatory Hygiene and Food Technology -RHTA-, and Food Technology -TA-).
- The number of modules per practice group: 12 practice groups (1 module/group) for slaughterhouse visits (HISA and RHTA); 4 practice groups (3 modules per group) and 6 practice groups (2 modules per group) for visits to the FPP, respectively, for RHTA and TA.
- The number of days, 3 and 2, respectively, for HISA and RHTA in slaughterhouses; 5 and 6, respectively, for RHTA and TA in the FPP-FVULE; 2 days with PH-OVS for RHTA.

Table 5.1.8. Number of visits to slaughterhouses and related premises for training in VPH (including FSQ)

	2022-2023	2021-2022	2020-2021	Mean
Extramural visits (HISA and RHTA)				
Ruminant slaughterhouses	39.9	36.9	43.5	40.1
Poultry slaughterhouses***	1	1	0	0.7
Related premises**	15.7	14.7	18	16.1
Intramural visits (TA and RHTA)				
FPP	204.5	205	237	120.8

** Only a group of 20 students.*

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

To coordinate the use of different animal species for training purposes, the Dean's Office collects information from the instructors responsible for each course and collaborates with them to establish an appropriate schedule. The number of animals employed in clinical training is contingent upon the clinical cases handled at the VHULE, care of companion animals and equines, and the number of animals from farms visited under agreements with the FVULE for food-producing species. Both preclinical activities and clinical placements must be systematically integrated into the teaching programme, aligning with the contents of the curriculum. Consequently, these integrations require approval from the Council of Faculty Departments, the Degree Evaluation Committee, and the Faculty Board.

Standard 5.2: ***In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under the supervision of teaching staff and follows the same standards as those applied in the VEE.***

Description of the organisation and management of the external sites

Throughout the different courses, students are consistently guided by teachers in their activities. The practical paths followed by the students unfold across a range of institutions, encompassing both the public and private sectors, and involve interaction with experienced professionals. The structuring and management of their studies adhere to the framework agreements established between each institution and ULE (link). Particularly in the Ambulatory Clinic during the 4th and 5th years, students visit various farms (see Annex 5.2) in small groups, ranging from one to four members. These placements offer invaluable insights into prevalent medical issues and surgical procedures in food-producing animals, along with knowledge of sanitary programs and biosecurity protocols. Students are actively involved in taking medical histories, conducting clinical examinations, collecting samples, administering medications, implementing animal identification systems, and performing pregnancy diagnoses.

The TFULE receives students from all courses of the curriculum daily for various practical training purposes, actively participating in aspects including:

- Ethology and welfare assessment of farm animals
- Review of production aspects such as animal weight and conformation, nutrition and feeding, milking, and milk production
- Physical evaluation of animals and reproductive examinations
- Diagnosis and treatment of animals when hospitalisation at the VHULE is not required, including castration of piglets under mother, medical and reproductive treatment
- Preventive medicine and herd health management of resident animals.

Furthermore, students have the opportunity to undertake practical work placements and farm visits, encompassing dairy and beef cattle, small ruminants (sheep and goats), pigs, poultry, and rabbits. These experiences allow them to learn by themselves the diverse production systems and their management.

Standard 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.***

Nursing care skills are acquired during rotations at the VHULE in the 1st, 2nd, 3rd, 4th, and 5th years through various clinical services where students are placed. Each clinical group is divided into small sub-groups that facilitate active participation and practical training of students in clinical examination and care of hospitalised patients (medication, feeding, monitoring), as well as participation in clinical procedures (sampling, diagnostic imaging, basic surgical procedures). Each subgroup is continuously supervised by a veterinary clinician (VHULE academic staff) who ensures that practical training is properly conducted and oversees animal welfare. Training in a problem-oriented diagnostic approach, along with diagnostic decision-making, is achieved through student participation in daily rounds with senior and junior VHULE staff (VTH academic staff) and through communication with students and assessment of their deductive process in case management. Overall, group sizes are reduced throughout the clinical training, with a maximum of 3-4 students per service or senior clinician/VHULE academic staff:

- 1st year students begin their internships at the hospital through the subject Introduction to the Veterinary Profession. Clinical activities are conducted with 3-5 students per group.
- 2nd year students, in groups of 10-12, attend the small animal internal medicine consultation.

- 3rd year students undertake their diagnostic imaging practices at the hospital through the subject Surgical Pathology, Radiology, and Anaesthesiology. Clinical activities are conducted with 10-12 students per group.
- 4th year students actively participate in VHULE services for small, large, and exotic animals (Internal Medicine, Neurology, Oncology, Dermatology, Ophthalmology, Cardiorespiratory, Surgery, Diagnostic Imaging, Anatomopathological Diagnosis, Reproduction), through practices in Special Pathological Anatomy, Surgical Clinic, Infectious Diseases I, Parasitic Diseases, Medical Pathology I and II, Obstetric and Reproductive Pathology. Clinical activities are conducted with 5-7 students per group.
- During the 5th year, rotations at the VHULE cover the emergency service (small and large animals) and the aforementioned advanced clinical specialties. Practical training and skills in obstetrics and reproduction are acquired both at the VHULE clinic and the teaching farm (small and large ruminants and pigs). In the final year, to complete practical training in large animal species, all students participate in outpatient clinic rotations. Practical clinical training is achieved by ensuring that students carry out the following procedures:
  - General consultations (internal medicine and surgery): Gather accurate and relevant clinical histories, handle and restrain the patient if necessary, perform a complete physical examination, assess the patient's nutritional status, compile a list of auxiliary tests demonstrating the ability to make clinical decisions, obtain biological samples (blood, urine, skin scrapings, etc.), discuss differential diagnoses, plan therapeutic approaches, communicate effectively with owners, use clinical database software, and write clinical reports.
  - Emergency and hospitalisation: Contribute to emergency care and first aid, administer medication (IV, IM, PO, SC) according to an appropriate treatment plan, including responsible use of antimicrobials and deworming, carry out any special procedures required (IV and urethral catheterisation, CRI calculation, ECG, blood pressure measurement, etc.), fluid therapy calculation, nursing care (dressing changes, walking, feeding, wound cleaning, post-operative care), euthanasia protocol, if necessary.

5.3.1.- Group size for the different types of clinical training.

Throughout the academic years, students are organised into 12 modules consisting of approximately 10-12 students each. The number of students in each module may vary slightly depending on enrolment figures. Often, these modules can be divided into submodules with 5-6 students each, with concurrent intra-mural activities (such as specialised clinics or other activities from the same service), overseen by multiple instructors who aim to maintain a low student-to-teacher ratio. This ratio never exceeds 10 in clinical settings and 20 in laboratory settings. A schedule of the distribution of rotations during the Practicum can be found in Appendix 3.2.

5.3.2.- Hands-on involvement of students in clinical procedures.

Students actively participate in all clinical procedures, both within and outside the VHULE. Specific activities vary depending on the field of work, but core elements may include the following:

- **First-opinion and Specialty Consultations**, both medical and surgical, in all animal species:
  1. Carry out the anamnesis of the patient (or population) and a complete physical examination, including neurological, orthopaedic, and ophthalmological examination, depending on the clinical case.
  2. Analyse nutritional and welfare status in individual and population medicine.
  3. Prepare the list of problems, differential diagnoses, working plan, and therapeutic approach.
  4. Communicate effectively with the client.
  5. Perform diagnostic procedures: fine-needle aspiration cytology, collection of blood and urine samples, blood pressure, Schirmer's test, ocular tonometry, skin scrapings,

electrocardiogram, faecal smear, Papanicolaou smear, etc.

6. Apply therapy: through different routes of drug administration (PO, SC, IM, IV).
7. Assist in other diagnostic and therapeutic procedures, such as endoscopic protocols, cerebrospinal fluid analysis, skin biopsy, chemotherapy administration, euthanasia, etc.
8. Apply bandages and other immobilisation techniques.
9. Write medical records and elaborate reports.

- **Hospitalisation and emergencies**, both medical and surgical, in all animal species:

1. Perform first aid procedures, when necessary.
2. Review the history, evaluate the patient through physical examination (TPR) and update the clinical record.
3. Prepare the list of problems, differential diagnoses, working plan and therapeutic approach.
4. Carry out routine diagnostic procedures in hospitalised animals: collection of blood and urine samples, blood pressure measurement, etc.
5. Work on different therapeutic procedures: placement of IV catheters, fluid therapy (choice of fluid, dose calculation and administration), medication administration by different routes, placement of urinary catheters, bandaging, wound cleaning and dressing, and other post-surgical care procedures.
6. Design and administer nutritional therapy for hospitalised cases.
7. Assist in other diagnostic/therapeutic procedures, such as feeding tube placement, drainage tube placement and effusion drainage, blood transfusion, endotracheal intubation and mechanical ventilation, euthanasia, etc.
8. Apply biosecurity procedures, especially in isolated cases.
9. Communicate effectively with the client.

- **Surgery Operating Rooms** (in all animal species):

1. Participate in the preparation of surgeries (surgical material, room and patient), taking into account biosecurity rules and the concept of aseptic surgery. Independently perform simple surgical procedures (ovariohysterectomy, orchiectomy).
2. Assist the surgeon in complex surgeries (as an assistant surgeon).
3. Suture surgical wounds and place bandages and drains, when necessary.
4. Be responsible for the immediate post-operative care of surgical cases.
5. Communicate effectively with the client.
6. Write medical records and elaborate reports.

- **Anaesthesia** (in all animal species):

1. Evaluate the pre-anaesthetic status of the patient.
2. Discuss and design the anaesthetic protocol to apply in each case and procedure.
3. Perform all complementary work, including fluid therapy administration and orotracheal intubation.
4. Administer the anaesthetic protocol validated by the teacher.
5. Monitor the induction, maintenance, and recovery of the anaesthetic procedure.
6. Assist the anaesthetist in decision-making, when necessary.

- **Diagnostic Imaging** (in all animal species):

1. Collaborate in patient positioning.
2. Initiate ultrasound studies and assist the teacher in complete studies.

3. Discuss and interpret the results of radiological and ultrasound studies and write reports based on diagnostic imaging.
4. Participate in computed tomography, when necessary.

- **Necropsies** (in all animal species):
  1. Review the individual/population history of the animal.
  2. Perform a complete and systematic necropsy, discussing the macroscopic findings and determining their relationship with the clinical findings.
- **Large Animal Reproduction**:
  1. Perform rectal palpation.
  2. Assist in various procedures commonly performed in livestock reproduction (especially, ultrasound).
- **Preventive Medicine/Population Medicine** (cattle, small ruminants, pigs, and poultry):
  1. Assess biosecurity measures on farms of different animal species.
  2. Evaluate the welfare conditions of animals of different ages and physiological states.
  3. Assess the potential role of environmental conditions as predisposing factors for diseases in animals of different ages and physiological states, and evaluate environmental control systems in poultry and pig farms.
  4. Clinically evaluate animals to identify potential disease indicators.
  5. Assess the body condition of the animals and the feeding program of the population.
  6. Review the health and preventive medicine programs implemented on different farms.
  7. Collect biological samples (especially blood and milk), significant in Population Medicine for the diagnosis of different types of diseases.
  8. Perform necropsies (in case of any casualty in the operation).
  9. Review mastitis control programs in ruminant dairy farms.
  10. Describe and analyse data records (including the use of management programs in farms where they are routinely used).
  11. Apply sanitary programs.
  12. Perform various common on-farm practices such as reproductive control (pregnancy diagnosis, insemination).
  13. Collection, evaluation, and preservation of ram and dog semen.
  14. Perform post-cervical artificial insemination.
  15. Detect pregnancy through palpation and the use of ultrasound.
  16. Perform neonatal care of piglets (teeth reduction, iron administration, tail docking, and castration).

5.3.3.- Procedures to enable all students to understand the clinical case and its management.

In all consultations, hospitalisations, anaesthesias, and surgery operating rooms, students meet with their designated instructors to analyse assigned cases as part of their daily routine. In situations where they have previously reviewed the case, they deliberate on the actions taken during the procedure and plan the next course of action. After the consultation, students analyse and discuss the patients they attended to with their teachers. This promotes the development of management skills. Students engage in comprehensive discussion sessions about clinical situations, all of which are supported by evidence-based medicine. During necropsy rotations, students analyse the diagnosis and

therapies used in each clinical case. Finally, this information is correlated with the lesions identified during the necropsy. Students are required to present several reports related to the activity:

1. COMPANION, EXOTIC, AND WILD ANIMAL CLINIC, EQUINE CLINIC: List of clinical cases attended, distributed by services/specialties, two complete (summarised) clinical histories incorporating a discussion section, or two clinical procedures practised.
2. OUTPATIENT CLINIC: List of attended clinical cases indicating the outing and specialty, one complete clinical history or clinical procedure practised.
3. NECROPSIES OF CLINICAL CASES: Daily anatomopathological written report of the cases attended the previous day, with the possible and differential diagnosis; discussion with the rest of the group and the teacher. And oral presentation of one of the necropsy cases and histopathology.

Standard 5.4: ***Medical records for patients seen intra- and extramurally under Core Clinical Training (CCT) must be comprehensive and maintained in an effective retrieval system to efficiently support the teaching and learning, research, and service programmes of the VEE.***

Description of the patient record system

GestorVet® is the software used for medical records, billing, pharmacy control, and appointments at the VHULE. The software is accessible through computers located in most clinical facilities, as well as in consultation rooms. It is also accessible via mobile phones or personal computers. The reception area of the VHULE handles all administrative matters related to patients and is composed of two support staff members who take care of payments, appointments, and record keeping. The reception/admission area staff also handles phone calls from referring veterinarians or owners and forwards them to the VHULE veterinarians. Outside of regular hours, on-call intern veterinarians oversee the opening of new files.

The first time a patient visits the VHULE, they are registered in the computerised database with a unique record, which includes the owner's details (name, address, ID document, phone number, and email address) and the patient's details (species, breed, age, and sex).

Images from tests are managed using RadiAnt DICOM Viewer® software. Within the patient's clinical history in the program, all diagnostic test reports, hospitalisation sheets, communications to referring veterinarians or owners are stored. All GestorVet® data are in the cloud, along with X-ray and ultrasound images. The imaging service regularly backs up the RadiAnt® database.

Paper documents are scanned into GestroVet® and stored in folders with the corresponding clinical history number. Staff members can access patient histories for teaching, research, or learning purposes at any time; upon request, students can access reports under supervision.

Comments on Area 5

There has been a year-to-year increase in the number of animal resources used in the training of students at all levels. Consequently, animal resources have been expanding, both in terms of the number of species and the variety of areas utilised for practical training.

Preclinical training is ensured by the ample availability of both healthy animals across various campus services and cadavers. The curriculum is structured so that, from the onset of their studies (1st year), students engage with animals and handle them in compliance with animal welfare principles.

Clinical training with companion animals, horses, and farm animals is comprehensive, spanning specific modules as well as the VHULE, TFULE and Ambulatory Clinical. These pathways present a broad spectrum of first opinion and referral cases involving various animal species, enabling the adequate development of skills in individualised care, production medicine, and herd health.

Suggestions for improvement in Area 5

The FVULE acknowledges the necessity to minimise the use of live animals and to substitute them with animal simulators, a strategy supported by the Rectorate's plans for the renovation of teaching infrastructures.

As another significant strategic line, it is crucial to continue improving clinical training in horses and farm animals. This goal is being achieved by increasing the number of extramural educators for livestock and the number of intramural educators for equines.

Efforts must continue to increase the number of clinical cases at the VHULE, with a particular focus on production species (cows, pigs, sheep) and exotic animals. For production animals, this can be achieved by offering advantageous economic conditions to farmers.

AREA 6. LEARNING RESOURCES

AREA 6. LEARNING RESOURCES

Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. Learning resources must be suitable to implement teaching facilities to secure the 'never the first time on a live animal' concept. 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, together with basic English teaching if necessary.

Description of the general strategy of the VEE on learning resources

In the current educational environment, information is no longer confined to traditional sources provided by instructors and textbooks in classrooms or laboratories. Teaching in the "digital era" entails students receiving a continuous flow of information on their personal devices through electronic resources such as virtual libraries, databases, and educational platforms for effective information management. The University of León provides these resources to staff and students, facilitated by credentials that grant them access to these fundamental and general services in higher education.

In this way, the FVULE, through the means provided by the ULE, guarantees the availability, adequacy and continuous improvement of learning resources for veterinary teaching and research. For this purpose, the ULE Library (https: //biblioteca.unileon.es/), the online learning platform moodle (https: //agora.unileon.es/), and the Informatics and Communications Service of the ULE (SICULE) (https: //sic.unileon.es/) are used.

The Library, as a learning support resource centre, has the mission of contributing to the development of *information skills* by making information resources available to the university community. In this way, students and staff are able to manage specialised information resources in their field, to use search strategies, preserving in any case the appropriate use of that information and avoiding plagiarism.

The University of León Library Catalogue (https: //catoute.unileon.es/) contains all printed and electronic documentation, as well as documents deposited in the Institutional Repository (BULERIA) and the portal of Journals edited by the ULE. This catalogue combines the library's own resources with others from databases, web resources, etc.

Students receive the necessary instructions to access and use the learning resources at the beginning of the first academic year. The FVULE Dean's team organises a Welcome Day in which, among other details, specific information is provided on how to access the Virtual Campus and manage the official ULE email address.

The University Library, as a resource centre for learning, teaching, and research, compiles and disseminates information about services and resources that they offer that may be of particular interest to teachers and researchers. In this regard, it offers training courses (link) for the handling of library resources, use and search in databases, and the use of reference managers (programs that allow the creation, maintenance, organisation, sharing, and proper citation of bibliographic references). Additionally, it publishes online guides, webinars, and video-tutorials on the use of the Moodle platform and its capabilities.

The usual procedure for the acquisition of learning resources is managed through the "Acquisitions and Management Unit" supervised by the General Library Committee of the ULE. Information is collected annually from the bibliography recommended in the subject teaching guides and the Degree Coordinators and Deans are contacted to acquire the titles that are recommended, taking into account the assigned budget. Likewise, direct suggestions from library users, both students and teachers, are collected and evaluated.

Some other teaching resources are directly acquired by academic staff in the departments using their own funds received for teaching activities and teaching innovation projects.

The selection of journals and databases is proposed by the Libraries of the Centres and Departments, and their acquisition and/or renewal are carried out considering their relevance, impact factor, frequency of consultation and use, and subscription cost.

Standard 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 a qualified IT person, an e-learning platform, and 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 VEE's core facilities via wireless connection (Wi-Fi) and from outside the VEE through a hosted secured connection, e.g. Virtual Private Network (VPN).

Brief description of the main library of the VEE

The Veterinary Faculty Library is located on the ground floor of the main building of the Faculty, covering a total usable area of 728 m2, distributed in two floors. It has two rooms for reading and consultation (with 174 reading seats) and a Journals archive. The library also has a 70 m2 area for book storage, located in the basement, with a capacity for 5,000 books. Additionally, in 2022 a room for the preservation of antique books has been set up.

Access to the library is restricted to members of the University Community. However, external users are allowed to use the facilities upon request of an identification card. Library users are mainly FVULE students, professors, scholarship and researchers. The Library of the Faculty of Veterinary Medicine has 10 onsite desktop computers and 11 laptop computers for loan for electronic consultation. The general catalogue of the University and the databases can also be consulted from any computer with Internet access (https: //catoute.unileon.es/).

The total budget for the purchase of books and Journals at the Faculty of Veterinary Medicine during the year 2022-23 was 15316 euros (4,206 euros for books and 11,110 for journals). The staff of the Faculty of Veterinary Medicine Library is: 1 library official, 2 library specialist technicians and 1 subordinate. They all work full time (35 hours per week), partially covering mornings and afternoons.

The library is open 12 hours a day (from 8: 00 to 20: 00) from Monday to Friday during the academic year, and six hours a day (from 8: 30 to 14: 30) in July and August. During exam periods, the ULE Central Library is open 24 hours a day.

The ULE Central Library (Biblioteca Universitaria San Isidoro) is located on the university campus and employs 19 qualified persons (13 library specialist technicians and 6 library officials). Facilities include group study rooms, classrooms/seminar rooms, and offices for research. The annual budget for the University Library of ULE in 2023 was €729,300.

Brief description of the subsidiary libraries (if any)

The five departments located at the Veterinary Faculty have their own Library, with the following characteristics:

Food Hygiene and Food Technology: 1 library on the first floor, 16 m^2, 15 seats;1 library on the second floor, 35 m^2, 15 seats.

Medicine, Surgery and Veterinary Anatomy: 1 library on the second floor of the Veterinary Hospital, 9 m^2, 16 seats.

Animal Production: 1 library in the first floor, 74,10 m^2, 40 seats; 1 library in the second floor, 42,15 m^2, 12 seats.

Animal Health: 1 library, second floor, 20 m^2, 14 seats.

Biomedical Sciences: 1 library in Physiology (15 seats), 1 small library in Pharmacology (6 seats) and 1 small library in Toxicology (6 seats).

The collections of printed books in the Departments are shown in the following table:

DEPARTMENT (area)	Books	Journals
Biomedical Sciences (Pharmacology)	500	17
Biomedical Sciences (Physiology)	242	33
Biomedical Sciences. (Preventive Medicine and Public Health)	19	
Biomedical Sciences. (Toxicology)	144	1
Food Hygiene and Food Technology (Nutrition and Food Sci.)	1660	85
Food Hygiene and Food Technology (Food Technology)	724	72
Medicine, Surgery and Veterinary Anatomy (Anatomy)	609	24
Medicine, Surgery and Veterinary Anatomy (Med & Surgery)	195	52
Animal Production	7611	466
Animal Health	1368	
Animal Health (Pathological Anatomy)	449	34
Animal Health (Infectious Diseases)	144	41
Animal Health (Microbiology)	131	13
Animal Health (Parasitology)	682	123
Total	**14,480**	**961**

Brief description of the IT facilities and of the e-learning platform

The SICULE (Information and Communications Service of ULE) is responsible for designing, planning, coordinating, managing, and ensuring the infrastructures and information and communication technology services provided to the university community in the areas of teaching, research, and administrative management. It is located in the CRAI-TIC building (Learning and Research Resources Centre) on the Vegazana Campus.

The SICULE is structured into the following areas:

- SICULE Coordination: responsible for the coordination and direction of the different areas of the SIC. Director-IT Manager
- Systems Area: Includes the exploitation of servers, both hardware and software, and the maintenance and parameterization of the applications in operation. It also deals with the installation and physical and logical maintenance of servers, databases, operating systems, storage systems, backup copies and related.
- Management Area: responsible for carrying out the analysis and implementation of applications with high maintenance demands, particularly those related to academic management.
- Communications Area: wireless and wired network facilities and infrastructure necessary to maintain both internal and external communications.
- Security and Quality Area: supervises and controls compliance with current legislation regarding physical and logical security related to ICT.
- User support area. This area is responsible for the management and maintenance of the User Service Centre (CAU), for the supervision and management of the free access computer rooms and classrooms dedicated to teaching at the University.

SICULE provides e-learning platforms that facilitate communication between teaching staff and students, based on Moodle. The platform for regulated education is called Institutional Moodle (http: //agora.unileon.es/). Additionally, there is a second platform for non-regulated education and other courses or teaching activities (http: //ariadna.unileon.es).

Regarding FVULE, there are ten computer labs with a total of 55 computers used for teaching purposes.

As already mentioned, during the academic year, the library offers user training courses, including general sessions and specific ones on database searches, platforms, and bibliographic references management software that enable the creation, maintenance, organisation, sharing, and correct citation of bibliographic references.

Description of the accessibility for staff and students to electronic learning resources both on and off campus

Students and staff at FVULE have access to Wi-Fi in all facilities and areas of the main building, as well as at VHULE, ensuring their connection to the internet and various digital tools. In addition to having a secure network throughout the campus, SICULE provides the option to use a Virtual Private Network (VPN). This option allows them to establish secure and remote connections, ensuring a protected virtual environment through access with institutional email.

Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, as well as facilities and equipment for the development of procedural skills (e.g. clinical skills laboratory). 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.

Regarding the print collection of the FVULE library, there are a total of 6,830 records, and their location can be checked in the ULE Library Catalog (https: //catoute.unileon.es/). This collection primarily includes books, scientific journals, conference proceedings, monographs, dictionaries, etc., related to veterinary science.

The FVULE library also provides access to over 61,000 electronic records, mainly e-books and electronic veterinary journals for teaching and research. These electronic resources are detailed in the following table:

Annual Reviews	Journal
AGRICOLA	Data Base
Animal health and production compendium	Data Base
CAB ABSTRACTS	Data Base
DIALNET	Data Base
EBSCO eBOOK	Books
eLibro Cátedra	Books
ELSEVIER SCIENCEDIRECT Ebooks	Books
ELSEVIER SCIENCEDIRECT Journals Complete	Journals
Essential science indicators. Institute for Scientific Information.	Data Base
EBSCOhost Food Science Source	Data Base
FSTA Food Science and Technology Abstracts	Data Base
InDICEs-CSIC	Data Base
Ingebook.	Books
International Food Information Service.	Data Base

ISSN portal	Data Base
Journal Citation Reports	Data Base
MEDLINE - PUBMED	Data Base
Online journal of veterinary research [Ed. electrónica] : OJVR.	Journal
Plataforma Eureka	Books
Scopus	Data Base
Springer Biomedical and Life Sciences ebooks	Books
Springer Protocols	Data Base
Springer Link	Journals
Vetmed resource	Data Base
Web of Science	Data Base
Wiley Online Library	Data Base
Wiley Online Library	Books

FVULE students and professors have access to high-impact journals in the field of Veterinary Sciences. The most representative ones are indicated below:

- Advances in Small Animal Medicine and Surgery
- American Journal of Veterinary Research
- Animal Reproduction Science
- British Veterinary Journal
- Clinical Techniques in Equine Practice
- Clinical Techniques in Small Animal Practice
- European Journal of Companion Animal Practice
- Domestic Animal Endocrinology
- International Dairy Journal
- International Journal for Parasitology
- International Journal of Veterinary Science and Medicine
- Journal of the American Veterinary Medical Association
- Journal of Dairy Science
- Journal of Equine Veterinary Science
- Journal of Exotic Pet Medicine
- Journal of Experimental Animal Science
- Journal of Feline Medicine & Surgery
- Journal of Veterinary Anaesthesia
- Journal of Veterinary Behavior
- Journal of Veterinary Cardiology
- Livestock Production Science
- Livestock Science
- Meat Science
- Online journal of veterinary research
- Pratique Médicale et Chirurgicale de l'Animal de Compagnie
- Preventive Veterinary Medicine
- Research in Veterinary Science
- Science in One Health
- Small Ruminant Research
- The British Journal of Animal Behaviour
- The Veterinary Journal
- Theriogenology
- Vaccine
- Veterinary Anaesthesia and Analgesia

- Veterinary and Animal Science
- Veterinary Clinics of North America: Equine Practice
- Veterinary Clinics of North America: Exotic Animal Practice
- Veterinary Clinics of North America: Small Animal Practice
- Veterinary Medicine and Science
- Veterinary Record
- Veterinary Microbiology
- Veterinary Ophthalmology
- Veterinary Parasitology

On the other hand, students can consult online the list of recommended bibliography in each subject through the "Leganto" platform (https: //biblioteca.unileon.es/leganto).

For the training of Skill Labs, the FVULE has collections and anatomical models, as well as simulators for the practice of clinical skills. Specifically, the following clinical simulation equipment is used in the VHULE: intubation and venipuncture, artificial insemination simulator in cattle, cattle dystocia simulator, radiography and ultrasound simulator. This means that the use of live animals is reduced for some clinical techniques, especially in reproduction, thus preserving animal welfare.

Comments on Area 6

The FVULE has a wide range of learning resources, as previously described (library, computing and communications, Wi-Fi network, software), adequately integrated into teaching methods, especially in recent years. Indeed, this substantial shift in the teaching model has positively impacted on the quality of veterinary education at FVULE, and the teaching and support staff, and students have successfully adapted to these methodologies, developing innovative projects that lay the groundwork for the future of education in the coming years.

Suggestions for improvement in Area 6

Undoubtedly, learning resources must be constantly updated and adapted to new methods that may arise in the future. Likewise, the training of teachers and students in the use of bibliographic and computer resources must be maintained and upgraded.

It is also essential to promote the development of educational innovation projects, which are currently underway at FVULE. This is very interesting in clinical subjects by using online learning resources that facilitate access to clinical cases and enable self-directed learning for students.

AREA 7. STUDENT ADMISSION, PROGRESSION AND WELFARE

AREA 7. STUDENT ADMISSION, PROGRESSION AND WELFARE

Standard 7.1: The VEE 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 VEE must provide accurate and complete information regarding the educational programme in all advertisements for prospective national and international students.
Formal cooperation with other VEEs must also be clearly advertised.

Description of how the educational programmes is advertised to prospective students

The FVULE uses various strategies to inform prospective students about access to the Degree in Veterinary Science, thus promoting interest among high school students. Comprehensive details about goals, curriculum, faculty members, schedules, and other aspects related to the program are available on both the ULE and FVULE websites. Furthermore, in the months prior to student admission, Open Day events are held, featuring talks, tours, and activities at the Faculty, which help students to become familiar with the university environment.

Access to the Veterinary Degree at the University of León is governed by ULE's regulations, which establish the maximum number of students to be admitted (link). For the academic year 2023-2024, the maximum number was set at 100 students, with a minimum required grade of 11.235 (on a scale of 0-14). In these 100 seats, most applicants have taken the University entrance exam (there is no specific exam for admission to the Veterinary Science Degree). However, a percentage of seats is reserved for students over 25 years (3%), students with disabilities (5%), high level athletes (3%), and graduates from other degrees (2%). Additionally, foreign students (from the EU) can access the university in Spain by requesting accreditation of their studies in their home country through the National Distance Education University (UNED). Likewise, students from non-EU member states can apply for the homologation of their studies to the Spanish high school diploma and thus gain access to the university.

Foreign students are also accepted through the ERASMUS+ International Exchange Program and the AMICUS Program, for which the International Relations Office of ULE provides support, guidance, and advice for incoming and outgoing students.

The maximum number of admitted students may increase by 5% in any given year due to exceptional circumstances. Since there are typically more applicants than available slots for the Veterinary Science degree, the admission of first-year students is highly competitive.

Veterinary students from other Spanish or foreign faculties can apply for a transfer to FVULE. The application is submitted to the Dean of the Faculty, who is authorised by the Rector to either accept or reject it, considering the availability of slots and the average grades of the applicant.

Regarding tuition, students have the option of full-time (60 credits) or part-time (30 credits). Regarding permanency, first-year students who have not passed 12 credits in the two available exam sessions in that academic year cannot continue their studies. Additionally, the maximum established for completion of the Veterinary Science degree is 10 academic years.

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

Table 7.2.1. Number of new veterinary students admitted by the VEE				
Type of students	*2022-23*	*2021-22*	*2020-21*	*Mean*
Standard students	*103*	*106*	*101*	*104,3*
Full fee students	*-*	*-*	*-*	*-*
Total	*103*	*106*	*101*	*103,3*

Table 7.2.2. Number of veterinary undergraduate students registered at the VEE				
Year of programme	*2022-23*	*2021-22*	*2020-21*	*Mean*
First year	*114*	*112*	*106*	*110,7*
Second year	*123*	*112*	*103*	*112,7*
Third year	*106*	*112*	*129*	*115,7*
Fourth year	*129*	*129*	*134*	*130,7*
Fifth year	*157*	*162*	*148*	*155,7*
Total	*629*	*627*	*620*	*625,3*

Table 7.2.3. Number of veterinary students graduating annually				
Type of students	*2022-23*	*2021-22*	*2020-21*	*Mean*
Standard students	*103*	*99*	*93*	*98,3*
Full fee students	*-*	*-*	*-*	*-*
Total	*103*	*99*	*93*	*98,3*

Table 7.2.4. Average duration of veterinary studies	
Duration% of the students who graduated in 2022-23:	
*+ 0***	*53*
+ 1 year	*25*
+ 2 years	*5*
+ 3 years or more	*20*

Table 7.2.5. Number of postgraduate students registered at the VEE				
Programmes	*2022-23*	*2021-22*	*2020-21*	*Mean*
Interns	*20*	*15*	*14*	*16*
Residents	*-*	*-*	*-*	*-*
PhD students	*53*	*58*	*58*	*56*
Master students	*5*	*7*	*3*	*6*

Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course.
The VEE 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 VEE.
Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

Description of the admission procedures for standard students:

The admission procedure to ULE is standardised for all students who wish to enter the Public Universities of Castilla y León, including the Veterinary Degree at ULE. The criteria and processes are established by the Ministry of the Presidency, Relations with the Courts, and Democratic Memory (Order PCM/63/2023), as well as by the Resolution of the Directorate of Universities and Research of the Autonomous Community of Castilla y León, dated May 2023. Detailed information about the student admission process at ULE is available on the website (link) and is summarised below:

After completing high school (Baccalaureate), candidates must pass the University Entrance Exam (EBAU). There are no additional specific requirements for the Faculty of Veterinary Medicine.

The EBAU consists of two parts: a general phase (compulsory for all high school students; maximum 10 points) and a specific phase with subjects related to the area of interest (voluntary, with the possibility to improve the grade up to a maximum of 14 points). Considering the elevated score necessary for acceptance into the Veterinary Degree program, passing both phases is imperative. The admission grade is determined through the following formula:

Admission score = $0.6NMB + 0.4CFG + aM1 + bM2$, where *NMB* is the average grade of 1st and 2nd years of Spanish Baccalaureate, *CFG* is the grade of the general phase of the EBAU, and *M1*, *M2* are the two best grades in the subjects of the specific phase of the EBAU, with *a* and *b* as weighting coefficients.

For students with disabilities, five percent of the total slots are allocated provided they certify an official disability degree greater than 33%.

There is no specific Selection Committee for access to the Veterinary Degree, as mentioned earlier, the admission system is regulated at the national level. Aspiring students can submit claims regarding their grade to the EBAU Organizing Committee, which must be resolved within the established timeframe. A second correction by a different professor may be conducted if necessary.

Admission criteria and procedures are publicly and transparently advertised. The results of the admission process for all public universities in Castilla and León are simultaneously published online and communicated to applicants through the platform https: //precyl.usal.es/.

Description of how the VEE adapts the number of admitted students to the available educational resources

The annual admission of students at FVULE is determined based on the available educational resources (facilities, staff, healthy and sick animals, and biosecurity and welfare standards). These factors are analysed in the FVULE's self-assessment report, which must be prepared and submitted to the Agency for the Quality of the University System of Castilla y León (ACSUCYL).

Description of the prospective number of new students admitted by the VEE for the next 3 academic years

The estimated number of new students entering the Veterinary Degree at ULE for the next three years will align with the current number (100 per year).

Standard 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.

Description of the policies and procedures dedicated to applicants with disabilities

Once students with disabilities are admitted, ULE initiates protocols to implement methodological adaptations to their educational program. For this purpose, ULE has a Support Service for People with Disabilities or Specific Needs (link). This service ensures the full inclusion of disabled students, establishing specific guidelines for each student and promoting the "*Student Helper Program*" to facilitate the integration of disabled individuals. With all these measures, these students can achieve the Day-One Competences at the time of completing the degree.

Standard 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 VEE 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 VEE 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.

Description of the progression criteria

The regulations on Academic Regime and Permanency in the official Degrees and Masters at ULE clearly specify the criteria for enrolment, progression, and continuity in the studies (link). Full-time students must enrol in a minimum of 30 credits and a maximum of 90. Those students enrolling in less than 30 credits are considered "part-time." As already mentioned, full-time students starting the degree must successfully complete at least 12 credits from the first year in order to be able to continue their studies. The total period available to complete the programme is ten years, but it can be extended for students with justified exceptional circumstances.

Students facing difficulties in adaptation or progression in the degree have support through personalised tutoring by professors who provide direct assistance and academic guidance. Teaching staff are mandated to maintain specific tutoring hours (six hours per week).

Students have the option to request a compensatory assessment to successfully complete a course and obtain the Veterinarian title (not applicable for Final Degree Project). This alternative was introduced to address situations where the inability to pass a course, due to specific student challenges, significantly delays the completion of studies and the achievement of the Degree. This approach takes into consideration the academic journey of the student, facilitating a global evaluation of their knowledge and competencies. Applications are reviewed by the Degree Monitoring Committee, and its implementation is regulated in the corresponding ULE Compensation Assessment Regulation (link).

Regarding the provision of information to students and the transparency of criteria and procedures, all previously mentioned details, including enrolment and progression, can be accessed on the ULE website (link).

The dropout rate for the Veterinary Degree at ULE remains below 15% (12.1% in 2020-21 and 13.6% in 2021-22). Various factors contribute to this dropout, primarily academic or personal challenges, or students transferring to other Veterinary Faculties closer to their places of residence.

Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be explicit.
The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.

The Law 3/2022, dated February 24, on University coexistence (link), outlines the disciplinary procedure for students who commit misconduct (major or minor). This process is initiated by the Rector, who appoints the instructor to conduct inquiries into the facts and responsibilities. It provides the involved parties with the opportunity to submit allegations and evidence within a ten-day period. The instructor then issues a proposed resolution, notifying the person under investigation, who can argue in his defence. In the case of major misconduct, the resolution may lead to expulsion from the university for a period ranging from two months to three years. The Law includes provisions for educational and rehabilitative measures as alternatives to sanctions for serious offences. These measures involve participation or collaboration in training, cultural, public health, sports, university extension, institutional relations, or similar activities.

Standard 7.7: Provisions must be made by the VEE 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 for disabled students, consistent with all relevant equality, diversity and/or human rights legislation.
There must be effective mechanisms for the resolution of student grievances (e.g. interpersonal conflict or harassment).

There are various established mechanisms to support the physical and emotional needs, as well as the welfare of FVULE students. These include, but are not limited to, support and advice services related to learning and career counselling, strategies to address impediments that prevent satisfactory progress on the course.

- Student Information Portal: Students can access the scholarship program from the Ministry of Education, Culture, and Sports, the Junta de Castilla y León, and other types of assistance. Available scholarships are published on the Student Information Portal (link).
- Psychological Support Program: ULE students have access to a psychological support program designed to assist in managing anxiety related to exams, enhancing self-control for effective studying, and addressing affective and interpersonal disorders.
- Internship and Employability Office: Is a service that helps manage curricular and extracurricular internships in companies. Additionally, it addresses informational and academic-career guidance demands from ULE students and graduates, promoting employability (link).
- Accommodation: ULE offers accommodation services for its students in University Residences. Moreover, a Housing Programme has been established, with an updated housing pool that includes comprehensive information and costs.
- Tutorial Action Plan (PAT): A tool offering support and guidance for recently enrolled students, aiming to provide specific attention to their academic and professional training through an efficient tutoring system. This system involves experienced course professors who are appointed by the Faculty Board.
- Tutorials: As indicated in the previous point 7.5, all professors offer specific tutorials to students taking their subjects, with public schedules. Students can also request an appointment outside of these hours by emailing the professor directly or using the Moodle tool for online tutorials.

- Veterinary Students' Delegation (DAV): FVULE has a student delegation that acts as official representatives in courses and in collegiate bodies of ULE.
- University Ombudsman: If a student perceives a violation of their rights and freedoms, he can seek advice from the Ombudsman for formulating their complaints.

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

Description of the mechanisms allowing students to provide their needs, complaints, comments and suggestions to the VEE

- Student Satisfaction Surveys: Completed annually by students (usually online), these surveys are designed by the ULE's Office of Evaluation and Quality to assess various aspects related to teaching activity carried out by the professors in the different subjects of the course.
- Tutorial Action Plan (PAT): In addition to providing attention to the academic and professional development of students, they can express their opinions, comments, or improvement suggestions. These inputs are conveyed to Course Councils and the Quality Committee, thus integrating them into the Quality Management System (SGIC) of FVULE.
-

Comments on Area 7

Regarding the progression and development of students at FVULE, we think there are suitable tools, always open to continuous improvement. These tools not only teach specialised knowledge in Veterinary sciences but also foster personal development and societal integration. The values instilled in students promote their commitment to solidarity with the broader community.

Suggestions for improvement in Area 7

Veterinary education must embrace a more practical approach, aligned with the demands of the profession and society as a whole. Similarly, it is necessary to implement an admission system based on an analysis of the national-level needs of veterinary professionals, thereby discouraging the creation of new Veterinary Faculties.

AREA 8. STUDENT ASSESSMENT

AREA 8. STUDENT ASSESSMENT

Standard 8.1: The VEE must ensure that there is a clearly identified structure within the VEE 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.

Description of the general student's assessment strategy of the VEE

The procedures for assessing student learning at the University of León are detailed in the "*Reglamento de Evaluación y Calificación del Aprendizaje de La ULE*" (link). This document establishes that the assessments focus on the learning outcomes achieved through various teaching activities, providing students with knowledge, skills, abilities and competencies in line with the guidelines, content and learning outcomes specified in the Course Guide for each subject. For this purpose, the correction systems and criteria, the number of exams and their temporality, and the guidelines for the execution of the evaluation tests are established.

The evaluation strategy of the FVULE also follows the University Student Statute (*RD 1791/2010, December 30*. link) which establishes the student's right to be informed about university regulations regarding evaluation, as well as the right to an objective evaluation based on an active teaching and learning methodology.

The Official Academic Calendar is approved annually by ULE and establishes the assessment periods. The FBFVULE approves the final exam schedule six months before the start of the academic year and publishes it on the FVULE website.

Evaluation is carried out based on competencies, including general, transversal, and specific (inherent to veterinary education). Most subjects combine ongoing assessment, supervised work, written exams, and evaluation of practical knowledge and skills.

-) theoretical knowledge

The assessment of theoretical knowledge is mainly based on written exams. Specific methodologies depend on each subject and may include multiple-choice tests, short-answer questions, etc., as well as ongoing assessment and supervised work.

-) pre-clinical practical skills

The assessment of pre-clinical practical skills is based on continuous evaluation, problem-solving, written reports of practical exercises, assessment of supervised work, presentations, rubrics, and practical exams. They are conducted on healthy animals, organs, dissections, pathological samples, parasites or microorganisms, radiodiagnostic images, or in the laboratory, depending on the subject. Attendance is mandatory, and a positive evaluation is required to pass the course.

-) clinical practical skills

It involves supervised clinical work, mainly with live animals. Students must demonstrate that they have acquired the clinical skills and abilities required in each subject. Evaluation is based on attendance, case discussions, ongoing skills assessment from day one through performance exams. Furthermore, the external tutor evaluates the student's clinical performance during Supervised External Practices, and the academic tutor reviews and grades the student's report on EPT.

-) soft skills

Soft skills are comprehensively assessed in various subjects. Evaluation methods such as seminars, report writing, and presentations using IT are employed to address the studied material. These activities encourage interaction and active student participation. The variety of assessment methods contributes to the acquisition of diverse cross-cutting competencies, including oral and written communication. These skills are also evaluated in the Final Degree Project, carried out by students under the supervision of a professor and publicly exposed and defended before a committee composed of three professors from the Degree program selected by the Faculty Board each academic year.

Standard 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 evaluation procedures are officially regulated by the "*Reglamento de Evaluación y Calificación del Aprendizaje de la ULE*" (link) ensuring the timely publication of exam periods. In the FVULE, various evaluation systems are implemented to align with the specific nature of the content in the curriculum subjects. The Teaching Guides thoroughly detail information on evaluation systems and criteria, and they are published on the website before the start of the academic year.

Description of the processes for awarding grades, including explicit requirements for barrier assessments.

The final grades for each subject are presented on a scale from 0 to 10, with one decimal, accompanied by a corresponding qualitative scoring system: 0 - 4.9: Fail (SS); 5.0 - 6.9: Pass (AP); 7.0 - 8.9: Notable (NT); 9.0 - 10.0: Distinction (SB). The minimum passing grade is 5.0. A distinction with "Honors" may be awarded to students who achieve a grade above or equal to 9.0. This special distinction is limited to a maximum of 5% of enrolled students in a subject.

The review of grading is a basic element of the teaching-learning process and serves to provide adequate feedback. Students can access their provisional final grades through the "Virtual Secretary" and are informed of the date, time and place of review. During this session, both the teacher and the student has the opportunity to review the exam and check the correction by means of a personalized tutoring.

In case of disagreement with the assessment results and review, students may submit a request for review to the Dean through the designated Tribunal. The specific appeal procedure is fully described in article 23 of the "Reglamento de Evaluación y Calificación del Aprendizaje de la ULE" (link) and should not exceed a period of 20 days.

Standard 8.3: The VEE 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.

The criteria and assessment systems for the subjects are reviewed annually by the responsible professors in coordination meetings within the teaching area and approved by the Department Council. Subsequently, they undergo review by the Degree Coordinator and the Teaching Committee, which may propose modifications before final approval by the Faculty Board. Finally, they are published on the Faculty's website in May-June, so that students have the information with sufficient advance notice. Evaluation methods must align with the guidelines established in the official "*Degree Verification Document"*.

The description of criteria and assessment procedures for each subject is included in the teaching guides and must follow the official procedure for academic planning established by ULE (link).

Description of the link between learning outcomes and assessment design

The competencies and learning outcomes that all students must achieve, along with the assessment systems used, are detailed for each subject in the curriculum. During coordination meetings involving professors, students, and the degree coordinator, an analysis of the results is conducted, and, along with satisfaction surveys, they are presented to the Quality Committee. Discrepancies between expected and obtained results are analysed by QCFVULE, who then propose improvements to the Faculty Board.

The Teaching Guidelines for each subject include a specific section on learning outcomes and another on the assessment process and criteria There must be coherence between both parts, which is ratified by the Teaching Committee of the FVULE, taking into account student satisfaction surveys and PAT meeting conclusions. On the other hand, the annual self-report on the Degree monitoring includes an specific section on assessment systems. The report is supervised by the QCFVULE and approved by the Faculty Board of the FVULE.

Standard 8.4: Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study.
The VEE 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.

Competencies, whether general or specific, are integrated into various courses throughout the Veterinary Degree curriculum, ensuring that students acquire them over the five years. The curriculum design guarantees the inclusion of all competencies, assessment systems and criteria, and measures to ensure compliance with the proposed learning outcomes.

As mentioned earlier, the annual self-report on degree monitoring includes a specific section on assessment strategies, analysing the performance rates of each subject and proposing improvement actions in this regard.

Within the competency-based learning approach, the FVULE teaching staff is progressively utilizing methods to foster student engagement throughout all stages of the learning process, with a particular emphasis on the Moodle virtual platform. Furthermore, student representatives actively contribute to the design of teaching and learning processes in the Department Councils, Teaching Committee, and Quality Committee.

Standard 8.5: Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of the acquisition 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 regular quality control of the student logbooks, with a clear distinction between what is completed under the supervision of teaching staff (Core Clinical Training (CCT)) or under the supervision of a qualified person (EPT). The clear distinction between CCT and EPT ensures that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student. The provided training and the global assessment strategy must provide evidence that only students who are Day One Competent are able to graduate.

Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence

The direct assessment of the acquisition of clinical skills and the ESEVT Day One Competences is directly conducted in the Clinical Practicum course during the final year. The current methodology relies on multiple evaluation criteria. Students are required to demonstrate these skills, acquired during their studies, to academic tutors using their practice notebook/journal, where the Professor verifies their evaluation. Furthermore, the assessment includes reports prepared by students in the Ambulatory Clinic and corresponding feedback from external tutors. Finally, the Responsible Professor for the course issues the final grade and, if applicable, confirms the acquisition of the competencies.

Comments on Area 8

In the assessment strategy for FVULE students, Subject Responsible Professors can choose the methods they deem most effective to enable competency-based evaluation. In this regard, the roles played by course coordinators and the Degree Coordinator are crucial in implementing competency-

based assessment. Throughout the academic year, several meetings (3-4 per year) are conducted with coordinators and student representatives to identify potential issues and propose improvement actions. These recommendations are then communicated to the Dean Office and the Quality Committee.

Suggestions for improvement in Area 8

The assessment of clinical skills could be even more comprehensive with a greater number of simulators or models, which the FVULE aims to acquire in the near future. Furthermore, there are ongoing efforts to implement the Portfolio, extending it to the last three years. This expansion will include diverse activities and assessment systems, providing a more accurate confirmation of the final acquisition of clinical competences.

AREA 9. TEACHING AND SUPPORT STAFF

AREA 9. TEACHING AND SUPPORT STAFF

Standard 9.1: The VEE 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 quality-assured programme of teacher training (including good teaching and evaluation practices, learning and e-learning resources, use of digital tools education, biosecurity and QA procedures) must be in place for all staff involved with teaching. Such training must be mandatory for all newly appointed teaching staff and encouraged on a regular basis for all teaching staff.
Most teaching staff (calculated as FTE) involved in core 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.

In Spanish Public Universities, teachers involved in the different subjects must be accredited by the National Accreditation Agency (ANECA) or by the regional ones (members of ENQA) in the corresponding subject areas. Once the accreditation is obtained, the candidate can apply for any of the existing teaching posts. The FVULE teaching staff is recruited in accordance with strict Spanish and EU regulations, in a transparent process that guarantees the suitability of the staff to meet the expected competencies in relation to the educational and research mission of the University.

The academic teaching staff categories are listed in Figure 9.1.1, and this classification is the one used in Table 9.2.1. As mentioned before, all academic staff, except for some assistant teachers (*Profesor Ayudante*) from 2023, must be accredited by ANECA or a local agency. In order to be accredited, teachers must meet certain criteria established for each category. Training and activities in teaching, research, and management are evaluated in such accreditation. The established criteria for each category can be found at the official ANECA website (https: //www.aneca.es/acreditaciones).

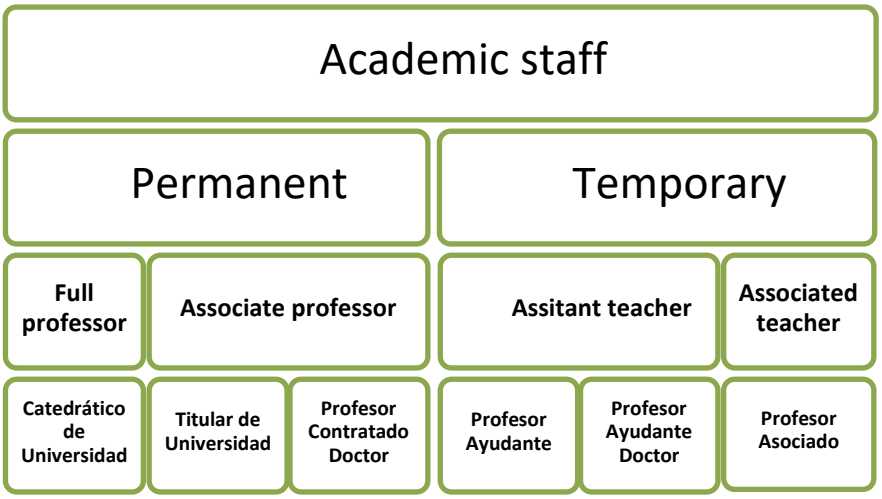


Figure 9.1.1. Academic teaching staff categories at FVULE

Full Professor (Catedrático de Universidad): full-time, civil servant, tenured position
Associated professor: it includes tenured positions, both civil servant (Titular de Universidad) and hired (Profesor Contratado Doctor)
Assistant Teachers are full-time, temporary, hired positions (Profesor Ayudante Doctor y Profesor Ayudante)
Associate Teacher (Profesor Asociado) is a are part-time (variable dedication), temporary, hired position

At Universidad de León, the Vice-rectorate for Teaching Staff has several delegated powers and attributions, such as the preparation, execution and monitoring of the Strategic Plan of the University, the evaluation of the teaching activity of university professors, the call for competitions for the selection of permanent teachers, assistants and contracted teachers and the planning and coordination of teacher training. The Vice-rectorate has two areas: Teaching Staff Planification Area and Teacher

Training and Evaluation Area. Each academic year, the Vice-rectorate for Teaching Staff elaborates a staff annual action plan depending on teaching needs of the departments and funding availability.

To ensure that the training received by students is appropriate in accordance with professional competences, each department may include specific requirements in their job descriptions for available positions and working experience in a particular professional sector related to the material to be taught, in the case of associated lecturers. This guarantees the suitability of the academic staff to fulfil the teaching duties assigned.

In the case of permanent positions, a competitive examination is called, in which, according to National legislation, only accredited candidates may apply for. The evaluation is carried out by an examining board composed of experts belonging to each specific subject area.

In addition to academic teaching staff, teaching at FVULE is supported by non-academic teaching staff: Interns, PhD students (FTE), Certified Specialists and Practitioners. Data are presented in Table 9.1.2.

The number and percentage of teaching staff with a veterinary degree is shown in Table 9.2.2. The FVULE meets largely the formal requirement laid down by EAEVE that "the majority of the teaching staff (calculated as FTE) involved in core veterinary education shall be veterinarians". It is expected that more than 2/3 of the teaching to students, as determined by student teaching hours, will be provided by qualified veterinarians". In fact, more than 84% of the teaching staff hold a degree in Veterinary. They are mainly found in pre-clinical, clinical, animal production and food science subjects. Furthermore, several associated teachers are hired in key areas such as food hygiene for abattoirs (2 OVS), public health (5 OVS) and animal health (5 OVS) in order to strengthen the practical training for the intramural curriculum, and several professionals (between 6 and 8 per year) are also appointed for extramural clinical training in large animals.

It is noteworthy that a significant number of veterinarians belonging to the academic teaching staff are members of various national and international boards, committees and agencies (EFSA, AEMPS, AECOSAN, etc.). Professional recognition in the teaching staff at the Hospital includes Diplomats of the European Board of Veterinary Specialisation (EBVS, 4), the Spanish Association of Veterinary Specialists in Small Animals (AVEPA, 4), and other accredited specialists in different fields (Vet Ambassador of the Association for the Osteosynthesis, Spanish Society of Anesthesiology and Pain Management, ANEMBE…).

Standard 9.2: The total number, qualifications and skills of all staff involved with the study programme, including teaching, technical, administrative and support staff, must be sufficient and appropriate to deliver the study programme and fulfil the VEE'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, teaching or support staff, senior or junior, permanent or temporary teachers. Guidelines for the minimum training to teach and to assess are provided in Annex 6, Standard 9.1.

In the last years, the Spanish public university in general and the Universidad de León and the FVULE as a part of it has reached a plateau in the recruitment of staff. Causes for such a situation can be explained by the recent economic crisis, the COVID-19 pandemic and the balance between teaching load and capacity based on university standards. On the other hand, the university has adopted new strategies to renew the teaching and research staff, considering the elevated average age of the staff (well over 50 years), and, consequently, the increasing number of retirements. In fact, at the FVULE there have been several incorporations of young professors in the last three years, mainly occupying positions of Assistant Teacher (temporary; both Ayudante and Ayudante Doctor), but also some teachers with temporary contractual positions have been promoted to permanent ones (Profesor Contratado Doctor and Profesor Titular de Universidad), contributing to the stability of the workforce, which represents a favourable aspect.

Table 9.2.1. Teaching staff involved with the core veterinary programme**

Type of contract	**2022-23**	**2021-22**	**2020-21**	**Mean**
Academic staff (FTE)				
Permanent				
*Full professor**	27	26	21	25
*Associate professor***	42	34	41	39
	69	**60**	**62**	**64**
Temporary				
*Assistant teachers****	7	12	12	10
*Associate teachers****	17	22	16	18
	24	**34**	**28**	**29**
Total academic (FTE)	**93**	**94**	**90**	**92**

*Full Professor (Catedrático de Universidad): full-time, civil servant, tenured position
**This item includes tenured positions, both civil servant and hired Associate Professors (Titular de Universidad and Contratado Doctor)
***Assistant Teachers (Ayudante Doctor, Ayudante): full-time, temporary, hired position
**** Associate Teacher (Asociado): part-time (variable dedication), temporary, hired position

Non-academic staff (FTE)				
Interns (FTE)	5	4	4	4
Residents (FTE)	0	0	0	0
PhD students (FTE)	5	5	4	5
Certified specialists (FTE)	3	2	2	2
Practitioners (FTE)	3	3	3	3
Total non-academic (FTE)	**16**	**14**	**13**	**14**
TOTAL TEACHING STAFF (FTE)	**109**	**108**	**103**	**106**

However, it is not easy to precisely estimate or predict the number of FTE academic and support staff for the veterinary programme for the next three academic years, due to the above-mentioned reasons and also to some recent changes in the University Laws. In any case, the prospects are positive in the short term, ensuring, at least, the replacement of retired staff and, consequently, lowering the average age of the teaching staff thanks to the incorporation of young teachers.

Regarding the Veterinary Teaching Hospital, the admission and human resources management is particularly relevant, as it usually needs to extend or strengthen new services. For this reason, the Veterinary Teaching Hospital has more flexibility and capacity to recruit new staff. However, although the current student/FTE academic staff and student/FTE support staff ratios can be considered adequate and within the EAEVE recommendations, they could be improved to some extent, especially in relation to practical teaching in small groups, which requires a larger number of teachers compared to other teaching activities.

In short, taking into account the hiring policy of the Spanish University, the renewal policy and the progressive ageing of the workforce, it is not expected that the number of FTE academic and support staff in the FVULE will increase significantly in the next three years.

The support staff for the Veterinary programme and the research staff of FVULE is presented in Tables 9.2.3 and 9.2.4.

The recruitment and promotion procedures of academic and non-academic staff at FVULE level follows a transparent procedure defined by the Universidad de León in strict accordance with national regulations. In each case, an open competition is organised to which all professionals who meet the established criteria can apply for.

• For academic staff, as explained before, the criteria include accreditation by ANECA and being trained and working in the target knowledge area. All applicants must sit the examination, which consists of two parts. In the first part, applicants must present a research project, a teaching project and their curriculum vitae, all of which must be supported by documentation. In the second part, the candidates have to give a lecture. Both parts are evaluated by an expert court and the candidate with the highest score is hired by the university.

• For non-academic staff, the recruitment criteria include education and work in the target area of knowledge and experience and being professionally active in the field of the position in the public or private sector. A selected panel of judges evaluates the CV of each candidate and the one with the best evaluation is recruited.

Table 9.2.2. Percentage (%) of veterinarians in teaching staff

Type of contract	**2022-23**	**2021-22**	**2020-21**	**Mean**
FTE	**84,4% 92/109**	**89,8% 97/108**	**84,5% 87/103**	**86,2%**

Table 9.2.3. Support staff of the veterinary programme

Type of contract	**2022-23**	**2021-22**	**2020-21**	**Mean**
Permanent (FTE)	**55**	**56**	**56**	**56**
Temporary (FTE)	**8**	**6**	**4**	**6**
Total (FTE)	**63**	**62**	**60**	**62**

Table 9.2.4. Research staff of the VEE

Type of contract	**2022-23**	**2021-22**	**20020-21**	**Mean**
*Permanent (FTE)**	**76**	**72**	**74**	**74**
*Temporary (FTE)***				
Predoctoral grant-holders	**41**	**43**	**42**	**42**
Postdoctoral grant holders	**14**	**13**	**17**	**15**
Total (FTE)	**131**	**128**	**133**	**131**

*Permanent academic staff of the FVULE and assistant teachers also conduct research activities as a part of their compulsory duties

**Both predoctoral and postdoctoral researchers are full-time staff

9.2.1.- Training to teach and assess students (including continuing education).

In the Spanish Universities, training to become a veterinary teacher and researcher starts by enrolling in a Master's or PhD programme. During the pre-doctoral training (usually 4 years), the candidates are focused on initiating both research and teaching activities. The teaching activities (a maximum of 60 hours per academic year) are carried out under continuous supervision in a specific area in which their doctoral supervisor is involved. This approach ensures the correct training of beginners, the transfer of knowledge and the application of different didactic methods, the management of students and different evaluation methods.

The Training School of ULE offers specific courses for doctoral students within the frame of the Cross-disciplinary training of doctoral students programme. These courses include topics related to

research (statistics, bibliography, presentation of results...), but also several matters specifically aimed at improving teaching skills and innovation, as well as training for applying to the accreditation processes of the different teaching staff. The courses are taught by experts in different areas, and ensure both theoretical and practical training for new teachers from the initial training phases.

In addition, all staff, regardless of category, have the opportunity to attend (or participate as trainers) various courses organised and promoted by the mentioned Training School. It has two specific programmes for teachers (PDI training and Teaching innovation) and one for support staff (PTGAS training programme). The PDI training programme is designed to train new professionals as well as to manage the continuing education of the ULE teaching staff. Training includes courses on pedagogy, inclusive education, institutional management, gender equality, research and knowledge transfer, languages and bilingual programmes, occupational risk prevention, health and well-being, and IT.

Furthermore, The Teaching Innovation Groups (GID) at ULE are work teams made up of a minimum of four professors who collaborate on a stable basis in the implementation of various activities of innovation and teaching improvement. These activities include the presentation and development of teaching innovation projects, the development of teaching and educational materials, the training of other PDI and the development of educational experiences, meetings, conferences and symposiums on teaching, publications, etc. To do so, they receive institutional support, such as professional recognition, incentives and, depending on the budget availability of the ULE in each financial year, access to financial support for the activities of the objectives proposed. There is also a Teaching Innovation Support Plan of the Universidad de León (acronym: PAID), whose main objective is to promote quality and innovation in teaching. To this end, innovative projects are financed that are aimed at improving the teaching-learning processes, evaluation and adaptation of teaching to the EEES. FVULE teachers actively participate in these calls and also present results of their innovation projects in the Teaching innovation seminars (organised by ULE, six editions so far) and in other national and international forums.

9.2.2.- Support Staff Categories

There are two types of support staff (Technical, Management and Administration and Services Staff, PTGAS): Civil servants and Contracted positions. In both cases, funding, selection and staff appointments are dealt with at University level, i.e. funds are provided from the University budget, except for temporary research support staff, whose salaries may be paid through research contracts and projects funded by private or public bodies outside the University.

Civil-service support staff is appointed through public examinations held by the University itself. Short-term hired support staff are paid from the University budget and selected from a standing shortlist of qualified candidates (bag of employment).

Support staff is graded on the basis of academic degree, responsibilities and specialisation of the position. They have different duties: administration and general services, care and treatment of animals, preparation of practical and clinical teaching, maintenance, etc.

9.2.3.- Support staff selection, recruitment and training.

The number and distribution of Technical, Management and Administration and Services Staff (PTGAS) is laid down in the current Employment Schedule (RPT) at University level. This schedule takes into account the requirements of each Faculty and/or Department involved. It should be noted that certain Departments in any given Faculty may also provide tuition, services or staff to other Faculties. In such cases, support staff numbers are determined on the basis of the number of staff dealing solely with Veterinary undergraduates, and the proportion of staff also working for other faculties.

As explained before, the University can recruit both permanent and temporary staff, and in most cases the ULE has also a pool of pre-selected staff (bag of employment) based on open calls and selection based on curriculum, work record and experience. The specific needs of faculties,

departments or services are met by contacting individuals from the bag of employment list, which is organised on the basis of the scores obtained. These employees are recruited on a temporary basis, and in order to promote them to a permanent position (civil servant support staff), the University must define the profile and issue a public call for competition. There are different calls for different categories and different levels of responsibility.

The training of the support staff after recruiting can be designed according to the personal interests of each one and can apply to specialisation courses. In addition, the University provides professional and continuous training through the Training School of ULE, with a specific formation and training programme for PTGAS. Each academic year, employees and trade unions define their training needs and draw up a training plan in agreement with the Training School of ULE. Each employee can select and request training courses based on individual and/or professional needs/interests, which are approved by the head of the unit, service, department or faculty. This training is carried out during working hours. The diploma obtained is also considered as part of the professional record.

Finally, and in relation to formal rules governing outside work, it should be noted that, in accordance with Spanish legislation and University regulations, full-time academic staff may not engage in practice or other related activities outside the University and may only act as consultants if a contract has been signed between the company and the University. Based on these rules, the ULE has decided to establish an incompatibility between academic staff professors and the relationship with clinical activities outside the FVULE. On the other hand, only part-time lecturers are allowed to take additional employment outside the University, and in the case of associated teachers, outside work is a prerequisite for obtaining this position.

Standard 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 VEE must clearly define systems of reward for teaching excellence in operation.
Teaching positions must offer the security and benefits necessary to maintain the stability, continuity, and competence of the teaching staff. Teaching 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.

All permanent tenured and non-tenured (contracted) academic teaching staff and assistant teachers are full-time employees (37.5 hours/week). The maximum teaching is 24 credits (or 240 hours) of teaching per academic year. This limit can be reduced due to different activities (e.g., research or management duties or trade union membership) to reach a minimum value of 16 credits per academic year. This is based on the Academic Dedication Plan for Teaching and Research Staff (PDA), an internal rule of ULE, that regulates academic dedication at the ULE, considering teaching activity + research activity + innovation and knowledge transfer activity + social responsibility considerations +management activity. The mentioned PDA allocates at least one third of the workload to research (14 h; 38%), six hours of tutorials (16%), five hours for management activities and the remaining 14.5 hours (34%) of classes and other teaching activities. PDA also regulates teaching activities of the rest of teaching staff: practitioners and assistant teachers are usually contracted for 60 teaching hours per academic year. PhD students have the same limit but they must be supervised by experienced academic staff. Postdoctoral researchers are limited to 80 teaching hours per academic year.

The teaching excellence of all academic staff is evaluated every 5 years by the ULE central services. This evaluation, called the "quinquenio", follows a procedure based on the DOCENTIA model, which was developed by the ANECA. The total teaching hours is evaluated by the Evaluation Commission, which makes a preliminary decision that must then be approved by the targeted Vicerectorate, and the final decision is made by the Rector. For these evaluations, the teacher must prepare a self-evaluation report, to show his/her merits in teaching. Additional reports are made by

the Faculty Board and the Department Council. Moreover the opinion of students is taken into consideration through questionnaires of satisfaction. The questionnaires of satisfaction are carried out in accordance with the approved models in the corresponding evaluation protocols, which includes the objective criteria of the application. If the evaluation is positive, the evaluated teacher will receive a salary increase. To date, all FVULE academic staff have been positively evaluated.

As academic staff at ULE is strongly encouraged to carry out research activities, the University supports such activities through the above-mentioned PDA system (by reducing teaching hours) and by providing support through specialised services (i.e. Support for Research Area, Institutes and Research Services Area, Transfer Office (OTRI) and Scientific Culture Area). In addition, every 6 years, any member of the academic staff (except Assistant Professors) can submit documentation to ANECA to be evaluated for excellence in global research activities within the "Sexenios" programme. In case of a positive evaluation, the evaluated teacher will receive a salary increase. Although the evaluation for excellence in research is optional, most of the academic staff at the FVULE participate in the “sexenios” programme and are positively evaluated.

It is noteworthy that ULE offers various opportunities for national and international stays of staff, mainly through the Erasmus+ programmes for teachers and support staff. To this end, ULE relies on a highly developed Internationalisation Office, which provides information and assistance on various programmes, projects and grants to facilitate staff exchanges that lead, among other things, to the sharing and improvement of teaching and research skills. During the last years, several professors from the FVULE have had the opportunity to spend an average one week in other European and other universities, and several professors coming from some European universities have been invited to teach in different subjects of the Veterinary Degree in León.

Standard 9.4: The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of teaching and support staff, including formal appraisal and informal mentoring procedures.
Staff must have the opportunity to contribute to the VEE’s direction and decision-making processes.
Promotion criteria for teaching 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.

All faculty and support staff are assisted and guided by internal (department, dean, vice-rector, specific university administrative units, unions) and external (professional associations, ANECA) groups and associations, despite there is no official formal programme for the professional development or mentoring of faculty and support staff at FVULE. However, all staff, whether academic or auxiliary, have easily accessible information on the procedures for their professional growth, development, evaluation, and promotion.

Regarding the involvement of staff in the decision-making processes of FVULE both teaching and support staff are involved in the management and decision-making processes of the Faculty at different levels (department, faculty, and university):

- At the departmental level**,** all staff can be part of the Department Council (Table 9.4.1). The permanent academic staff can present their candidatures for being elected (by anonymous vote) for department director (four-year term).
- At the Faculty level, all staff can be part of the Faculty Board (Table 9.4.2). Participation in different committees dependent and independent on FB, Academic Master Committees and Doctoral School, etc, are also strongly encouraged. Additionally, academic staff can present their candidacies to be elected (by anonymous vote) for the position of Dean (four-years legislature).

- At the University level, the ULE staff have the opportunity to participate in:
  - University Senate, which is the highest representative body of the University community. It is responsible for the drawing up of the Statutes and other tasks assigned by Law. It is made up of representatives of the 4 groups (as at the faculty level) and elected by anonymous vote.
  - Governing Council is the ordinary governing body of the University. It is composed by the Rector and his team, Deans and representatives of the University Senate among others.
  - Every 4 years, any member of the academic staff can present their candidature to be elected (by anonymous virtual vote) for the post of Rector and for the group of Vice-rector group.

Table 9.4.1. Representation of staff (%) of FVULE Department Councils and Faculty Board

Group composition	*Department Council (%)*	*Faculty Board(%)*
Permanent Academic Staff	60	51
Rest of Academic Staff & Researchers	16	19
Degree, Master and PhD students	20	25
Administrative & Support Staff	4	55

Standard 9.5: A system for assessment of teaching and teaching staff must be implemented on a cyclical basis and must formally include student participation. Results must be communicated to the relevant staff and commented upon in reports. Evidence must be provided that this system contributes to correcting deficiencies and to enhancing the quality and efficiency of education.

As mentioned before, the system for assessment of the teaching activity of the teaching staff of ULE has been developed as a consequence of the participation of this University in the Teaching Performance Assessment (DOCENTIA) of the National Agency for Quality Assessment and Accreditation of Spain (ANECA). Evaluation procedures require input from various agents involved in staff teaching evaluation, including:

- The teacher, who must prepare a self-evaluation report to show his merits in teaching.
- The students, who complete a survey on teaching quality for each of their teachers of all subjects.
- Academic officials (Faculty Deans, Centre Directors and Heads of Department), who are required to fill a report for each teacher.
- The Evaluation and Quality Office, which provides the institutional data required for evaluation of staff teaching quality, as well as advice on technical issues as required by the evaluation committee.

As it can be observed, the assessment implies a system of questionnaires for the students, whose participation is highly encouraged. This system has the aim to serve as a guide for teachers to know the perception their students have about their teaching activities, and thus to recognize the positive aspects and to identify the teaching aspects subject to improvement. Surveys are carried out by electronic questionnaire, available on the intranet of the University. Each year, students are asked to complete an anonymous questionnaire for each professor they have had during the academic year. The answers are based on a scale of 1 to 5 (1 being the lowest and 5 the highest grades). The last question summarises the “overall satisfaction” with the professor. These results are analysed by the Evaluation and Quality Office and, new measures for improvement can be proposed and submitted to the Faculty Board for discussion and approval. The positive assessments of teachers are needed to obtain further accreditation by ANECA.

Comments on Area 9

Overall, at FVULE the potential and the quality of teaching is high, treasuring a long teaching experience with highly qualified, motivated and experienced staff, and an appropriate student-teacher ratio. There has been a significant incorporation of teachers, accredited by ANECA, in the last years, which ensures their qualification and transparency in recruitment and promotion and has undoubtedly had a positive effect on their expertise and dedication to teaching.

Moreover, although the average age of teachers is still high, the renewal has already started and is hoped to steadily continue. In addition, the high percentage of veterinarians on the teaching staff (over 84%) and the fact that most of the Departments involved in the Veterinary Degree are located at the FULE are good evidence of the clear veterinary orientation of the teaching.

Suggestions for improvement in Area 9

Ideally, formal programmes should be developed and implemented at University level to train new educators and support staff, and to guide teaching and support staff for professional development and mentoring. At FVULE level, the number of EBVS diplomats and residency programmes should be increased and consolidated.

We believe that the number of administrative and services of support staff should increase, especially the ones related to teaching activities. This staff has not significantly increased in the last 10 years and the timetable of most of the support staff does not match the teaching and research activities timetable in the Faculty. It would, therefore, be advisable to split their working day in morning and afternoon sessions, to meet the educational needs conveniently.

AREA 10. RESEARCH PROGRAMMES, CONTINUING AND POSTGRADUATE EDUCATION

AREA 10. RESEARCH PROGRAMMES, CONTINUING AND POSTGRADUATE EDUCATION

Standard 10.1: The VEE must demonstrate significant and broad research activities of teaching staff that integrate with and strengthen the study programme through research- based teaching. The research activities must include veterinary basic and clinical sciences. Evidence must be provided that most teaching staff are actively involved with research programmes (e.g. via research grants, publications in congress proceedings and in peer-reviewed scientific journals).

Description of how the research activities of the VEE and the implication of most teaching staff in it contribute to research-based veterinary education

According to Organic Law 2/2023, of March 22, of the University System (LOSU), in its article 11, research is one of the fundamental functions of universities. Research, like teaching, is a right and a duty of teaching and research staff. Therefore, teaching and research staff will be able to develop both activities with different intensities throughout their academic career, without prejudice to the standards established at each university. University research must cover all areas of knowledge, whether scientific, technological, humanistic, artistic or cultural. The ULE, and in particular the FVULE, is not an exception; all staff are encouraged and supported, both financially and academically, to maintain their research activities.

Currently, FVULE is made up of 19 research groups (https: //www.unileon.es/grupos-investigacion/grupos.php). Their activities resulted in the publication of more than 700 scientific publications in peer-reviewed scientific journals (JCR-indexed journals) in the period 2020-2023, more than 60% of them in Q1 journals (Appendix 7). This has contributed to the national and international recognition of the FVULE as a research centre, which is also reflected in the recently published 2023 Global Ranking of Academic Subjects, Veterinary Sciences. The FVULE was ranked 76-100 among all veterinary schools in the world and 5th among the 12 existing veterinary schools in Spain (http: //www.shanghairanking.com). In addition, 4 researchers working at FVULE are among the 2% of the world's most cited scientists in their field according to the ranking published by Stanford University.

Table. 10.1.1 lists the major funded research programmes in the FVULE which were ongoing during the last complete academic year (2022-23). As it can be appreciated, research groups of FVULE periodically receive funding for research from the National and Regional research funding agencies in accordance with their scientific output as well as from the European Union and other international funding bodies.

In addition, the ULE has its own programme (Programa Propio), which offers, among other things, general research aid. This aid aims to facilitate the research activity and training of researchers carried out by the staff within the framework of the tasks of the Groups and the Research Institutes recognized by the ULE. The aid is provided through an internal ULE call to all research groups, proportionally based on their scientific production (JCR papers, congress presentations or posters, research grants from European, National or Regional calls, research or assistance contracts with companies) of the previous year.

Research at FVULE contributes to research-based veterinary education in different ways. First as teachers, researchers have the opportunity to apply and transfer their knowledge during practical and theoretical sessions, allowing students to receive the latest available information, making them aware of the current situation and of possible future challenges. On the other hand, different research activities, such as seminars, congresses, conferences, etc. are celebrated during the academic year, bringing students the research carried out by FVULE researchers or visitors. Finally, as scientific dissemination is a priority at ULE, all research staff at FVULE are aware of its benefits and actively participate in dissemination activities. Overall, all these activities not only contribute to the scientific training of students, but also make them aware of the different research lines carried out at the Faculty.

Table 10.1.1. List of the main ongoing projects at the FVULE

Nacional projects

Reference	Title	starts	ends	Funding body	Total
Z383	Role of the ABCG2 transporter and its polymorphisms in the excretion of antiparasitic agents and pesticides in ruminant milk	2019	2022	State Research Agency	110,000.00 €
Z426	Dual role of the ABCG2 transporter in the excretion of novel flavor molecules and feed contaminants including mycotoxins in ruminant milk and exosomes	2022	2025	State Research Agency	132.768.00 ,
Z414	Apoptotic Competition Against Pathogens	2021	2024	State Research Agency	150,000.00 €
Z411	New tools for drug discovery and detection of anthelmintic resistance to gastrointestinal nematodes in small ruminants.	2021	2024	State Research Agency	175,000.00 €
Z421	Agroecological sheep/goat production system based on the valorisation of halophytes of saline areas in the Mediterranean basin (HaloSheep)	2022	2025	State Research Agency	173,500.00 €
A257	Analysis of the role of epigenetic marks and genomic variability in the regulation of transcription in tissues of productive interest in dairy sheep.	2019	2022	State Research Agency	200,000.00 €
I395	Function of p73 in the cellular adhesome: implications in vascular morphogenesis, angiogenesis and cancer	2020	2024	State Research Agency	190,.000.00 €
C314	Mechanisms of natural and vaccine-induced resistance to sheep paratuberculosis	2019	2022	State Research Agency	160,000.00 €
C381	Immune Response and Trained Immunity in the Early Stages of Paratuberculosis in Sheep: Vaccination and Infection	2022	2025	State Research Agency	159,648.00 €
D383	Importance of fresh vegetable products in the transmission of ESBL-producing enterobacteriaceae and E. coli pathogens.	2020	2023	State Research Agency	70,000.00 €
Z412	Gut Microbiota and Drug-Induced Liver Damage (DILI). Transfer of specific profiles and modulation of microbiota in experimental models of DILI by clavulanate.	2021	2024	State Research Agency	120,000.00 €
Z427	Role of ACE2 and Vitamin D Supplementation in Physiological Adaptations to Strength Training in the Elderly	2022	2026	State Research Agency	61,200.00 €
D409	New strategies based on plasma technology to reduce biofilm formation in the dairy industry.	2021	2024	State Research Agency	105,000.00 €
D408	Evaluation of sources and routes of transmission of antimicrobial resistance in the meat industry and associated environments.	2021	2025	State Research Agency	124.434.00 €
D420	Bacterial Solutions for Food Safety and Quality Assurance (BASIQS)	2021	2024	State Research Agency	130,000.00 €
D456	Assessment of plasma-based technologies for water reconditioning of process water in fresh produce processing plants as a sustainable water management strategy	2022	2024	State Research Agency	150,000.00 €
D468	Recovery of red beet waste to obtain high value-added products through innovative and sustainable technologies	2023	2025	State Research Agency	134,500.00 €
I442	Microbial formulation and validation of bioactive and lifespan-controlled bioplastics	2022	2024	State Research Agency	143,000.00 €
A278	Residues and by-products in dairy sheep feed: rumen fermentation, microbial populations, methane emissions, milk production and product quality	2022	2026	State Research Agency	114,240.00 €

I414	Characterization of the microbial signature associated with celiac disease. Impact of diet on gluten immunogenicity.	2021	2024	State Research Agency	140,.000.00 €
C335	Host response and gut microbiome as targets in the control of porcine dysentery	2020	2024	State Research Agency	158,100.00 €
C391	Characterization of antimicrobial resistance dynamics in pig production and associated environments through the use of massive sequencing techniques	2023	2025	State Research Agency	119,500.00 €
Z413	Generation of a knockout model of hypoxia-inducible factors to improve sensitivity to tyrosine kinase inhibitors in the treatment of hepatocellular carcinoma.	2021	2024	State Research Agency	70,000.00 €
D363	Alternatives to the use of disinfectants in the food industry aimed at reducing the survival of Listeria monocytogenes and Salmonella enterica on surfaces.	2019	2022	State Research Agency	100,000.00 €
					3,190,890.00 €

Regional projects

Z398	Development of new compounds of natural origin with biological activity of therapeutic and phytosanitary interest: evaluation of their interaction in vitro and in vivo with ABC transporters	2020	2023	Junta de Castilla y León	160,000.00 €
I397	Study of the impact of diet on microbial gluten metabolism and immunogenicity associated with celiac disease	2020	2023	Junta de Castilla y León	167,165.00 €
D388	Phenotypic and genotypic characterization of antibiotic resistance in poultry meat	2020	2023	Junta de Castilla y León	169,488.48 €
					496,653.48 €

European projects

SMARTER-772787	SMAll RuminanTs breeding for Efficiency and Resilience.	2018	2023	European Union	306,275.00 €
MASTER-818368	Microbiome Applications for Sustainable food systems through Technologies and EnteRprise	2019	2023	European Union	505,250.00 €
STOP RIA2017NCT-1845	Stopping Transmission of intestinal Parasites.	2018	2023	European Union	274,361.31 €
EFSA	Integration of genomics in surveillance and risk assessment for outbreak investigation.	2019	2020	European Union	57,543.20 €
EFSA	Identification of risk factors and hotspots of antibiotic resistance along the food chain using next-generation sequencing.	2021	2021	European Union	28,371.20 €
ESTELLA-101058371	DESign of bio-based Thermoset polymer with rEcycLing capabiLity by dynAmic bonds for bio-composite manufacturing	2022	2025	European Union	370,692.50 €
DELISOIL-101112855	Delivering Soil improvers through improved recycling and processing solutions for food industry residues streams	2023	2027	European Union	598,462.50 €
TAILSCAN-101127986	Automatic and objective surveillance of short tails and tail lesions in pig abattoirs	2023	2025	European Union	108,105.91 €
EUP-AHW-101136346	Fair, healthy and environmentally-friendly food systems from primary production to consumption	2024	2026	European Union	509,236.25 €
					2,758,297.87 €
				Total Research funding	**6,445,841.35 €**

Standard 10.2: All students must be trained in scientific methods and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.

During their degree, students at FVULE are made aware of the importance of evidence-based medicine, scientific research, and lifelong learning in different ways:

- Directly from the teaching staff: As it has already been mentioned, the VEE ulty carries out solid research work. The importance of evidence-based medicine, scientific research and lifelong learning is therefore communicated directly to students. This is also transmitted through innovative teaching strategies for better student engagement (e.g., flipped classrooms, project-based learning, peer instruction, etc.).
- Final Degree Project: In preparing and defending their FDP, students have to put into practice the research-related skills and knowledge they have acquired during their studies. In this subject, students are initiated into bibliographic search, scientific methods and research techniques, and the writing of scientific papers.
- Academic events. Several seminars, scientific meetings and congresses are held at FVULE during the academic year. Most of them have free access or special rates for students, and some are organised by the Student Unions.
- Scientific dissemination activities. The FVULE actively participates in the scientific dissemination activities, such as the National Science Week, the European Researchers Night and Expociencia, a local event organised by ULE. In addition, the FVULE actively shares knowledge via social media (Instagram, Twitter and Facebook) and is in close contact with the Scientific Culture Unit of the ULE which helps to transfer the scientific knowledge generated, highlighting the importance of science and lifelong learning.

In addition, FVULE offers several non-compulsory research opportunities for undergraduate students:

- Collaboration Scholarships. Every year, the Ministry of Education and Vocational Training and Sports awards grants to students in their final year of study. The aim of this scholarship is to facilitate the participation of students to get engaged in research activities/training in ULE Departments, in a way that is compatible with their studies, in order to initiate research tasks and facilitate their future professional decision (Becas de colaboración (Convocatoria 2023 - 2024) | Ministerio de Educación, Formación Profesional y Deporte (educacionyfp.gob.es). The average number of Collaboration scholarships awarded to the FVULE over the last three years has been 7 per year.
- ULE's own research programme (Programa propio) has a Summer Residences in research groups programme. It offers an introductory research programme for ULE undergraduate and master's students through collaboration with the University Research Groups during the summer months. Undergraduate students who have passed 50% of the credits of their degree may request collaboration with a ULE Research Group that has offered places for this program. Participating students must collaborate for a maximum of 8 weeks between June and September (minimum of 200 total hours). Depending on budget availability, those selected in order of priority according to their academic record will also receive financial aid. The average number of Summer Residences awarded to the FVULE over the last three years has been 10 per year.
- During their undergraduate studies, students can choose internships at research centres, either in the 5th year of their degree or extracurricular practices in any year of their undergraduate studies.

Concerning the Final Degree Project (FDP), based on the legal regulations (Orden ECI/333/2008), since 2014 it is compulsory for all students to prepare and present a FDP worth 6 ECTS. The FDP involves the completion, presentation and defence, by the student, of an original, individual and autonomous work, under the supervision of a tutor or tutors, in which the knowledge and skills

acquired throughout the Degree are applied and developed. and that demonstrates that he has achieved the competencies provided for in the Study Plan. The FDP may consist of:

a) Experimental work that may be carried out in Departments, Institutes/Research Centres, University Centres, companies and other related institutions.

b) Literature review and research work focused on different fields related to the degree.

c) Work of a professional nature directly related to the studies completed.

d) Clinical or case studies related to the degree.

An FDP reflects the structure of a scientific article; it must include a bibliographic review as scientific contextualisation, introduction, hypothesis and objectives, materials and methods, results, discussion, conclusions, bibliography and summary. Once completed, it must be presented as a written document and defended orally individually in front of a Board of Examiners composed by 3 teachers responsible for the assessment.

The evaluation criteria will take into account the tutor's report, the competencies to be covered by the FDP according to the corresponding Study Plan, and the following aspects:

- content, organisation and formal writing of the report
- quality and extent of the bibliographic review carried out
- quality of the work carried out (difficulty of the topic addressed, originality, timeliness, alternatives presented, results obtained and discussion thereof)
- presentation, oral presentation, capacity for synthesis and clarity in the answers to the questions posed by the members of the evaluation committee.

Accordingly, the final grade of the FDP is deliberated by the Board of Examiners considering:

[1] The supervisors report (although this is informative only); [2] The content and form of the written work (25% of the mark); Literature review (10%); [3] Overall quality (35%); [4] The oral presentation and defence (30% of the mark).

The minimum requirements for the FDP are as follows:

1. Written memory 25%

1.1. Content: The format, length and presentation of the written report are in accordance with the standards. Tables and Figures are presented and used correctly.

1.2. Organisation: The parts of the work are correctly structured and the sections on objectives, methodology, results, discussion and conclusions are clearly identified.

1.3. Formal writing: The writing of the work is clear and easily understandable, appropriately using scientific and correct terminology both grammatically and orthographically.

2. Bibliographic Review 10%

Bibliographic references include a wide and updated variety of sources related to the topic and objectives of the work.

3. Quality of work 35%

3.1. Difficulty, originality and topicality: The work addresses a current topic in the field of veterinary sciences, in which its own difficulties are overcome by providing originality in its approach.

3.2. Results: The results are presented in a clear and concise manner, using tools and visual elements that improve compression

3.3. Discussion: The results are interpreted appropriately, in the context of other studies carried out in the same field.

3.4. Alternatives presented in the conclusions: The conclusions are clear and adjust to the approach and objectives, highlighting, where appropriate, the alternatives proposed in the work based on the studies carried out.

4. Defence 30%

4.1. Presentation: The presentation is structured in an orderly manner, its content is adjusted to the written memory, and it is appropriately combined with the oral presentation, using sufficiently attractive visual means.

4.2. Oral presentation: The presentation is clear and correct, using adequate and precise vocabulary, conveying security and sufficient knowledge on the subject.

4.3. Synthesis capacity: The exhibition summarises the fundamental axes of the work in the given time, clearly transmitting the main results and conclusions.

4.4. Clarity in answers: The answers to the questions raised are clear, concise and correctly argued.

Standard 10.3: The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the study programme and are relevant to the needs of the profession and society.

Table 10.3.1. Number of students registered at postgraduate clinical training

Training	*2022/23*	*2021/22*	*2020/21*	*Mean*
Interns				
Companion animals	16	13	12	**14**
Equine/Production animals	4	2	2	**3**
Total	**20**	**15**	**14**	**16**
Residents				

Table 10.3.2. Number of students registered at postgraduate research training

Degrees	*2022/23*	*2021/22*	*2020/21*	*Mean*
PhD	53	58	58	**56**
Masters	5	7	3	**6**
Total	**58**	**65**	**61**	**61**

Table 10.3.3. Number of students registered at other postgraduate programmes in the VEE but not related to either clinical or research work

Courses	***2022/23***	***2021/22***	***2020/21***	***Mean***
Scientific Conference Armed Forces Horse Breeding Service	-	-	50	50
Veterinary teaching congress (VetDoc)	10	10	-	10
Sessions at the Academy of Veterinary Sciences of Castilla y León	20	20	20	20
Spanish Veterinary History Association	5	5	5	5

Table 10.3.4. Number of attendees to continuing education courses provided by the VEE

Courses	*2022/23*	*2021/22*	*2020/21*	*Mean*
Specialist in hospital veterinary clinic (TP)	8	5	11	8
Master in veterinary clinic of small and exotic animals (TP)	-	-	5	5
International Master of continuing education in Food Safety Audit (TP; online)	10	14	25	16
One Health Platform	25	25	25	25

TP: ULE-endorsed program (Título propio)

In Spain, the National Education Regulations for Doctoral Studies were modified in 2011 to adapt them to the European Higher Education Area, being reviewed according to the procedures established by RD 99/2011. As a result, in 2014, the ULE created the School of Doctorate. The Doctoral School of the University of León is tasked with the academic and administrative management of doctoral studies taught by the ULE. Its essential objective is to guarantee the highest quality in doctoral studies, coordinating and promoting excellence in the Doctoral Programmes offered. Currently, the main Doctoral Programme developed in the FVULE is the **PhD Program in Veterinary and Food Sciences** (link). Within the doctoral programme, in addition to their research, students participate in a series of transversal and specific training activities that contribute to their scientific-technical training. These include:

1. Doctoral School Days (compulsory): Presentation and discussion of the aspects related to your research (bibliographic review, planning and results of the experiments carried out in that period) before a group of doctors from the research group or groups involved in the Doctoral Thesis. Sessions are held annually. The objective is to promote the capabilities of public presentation and discussion of scientific objectives and data in the usual way it is done in the scientific field.

2. Attendance at conferences, seminars, conferences and conferences (compulsory): In order for the doctoral student to become familiar with the dissemination of scientific information in different forums and to actively participate in some of them with their research results, meet and establish contacts with other authors or groups that work in the same field of study. In general, attendance at conferences, seminars, conferences and/or specific congresses, whether held in Spanish or English, is contemplated, and they may attend/participate at any time during their research training.

3. Stays in Research Centres (optional): To guarantee the achievement of the skills in this training activity, the thesis Directors will facilitate the stay in other Research Centres or Universities. This activity is not mandatory, although it is highly recommended. The objective is for the doctoral student to complete their training by learning about and participating in the work of a research group different from their own, which they can carry out during any stage of the Doctorate period.

Additionally, it is noteworthy that the Training School has a specific programme for PhD students, the Transversal Training Doctoral Students Programme (https: //servicios.unileon.es/formacion-transversal-alumnos-de-doctorado/). As an example, these are the courses that were taught in the programme in the 2022-23 academic year:

- Formal standards and practical keys for the writing of scientific texts in sciences and health sciences
- Meeting on the impact of international legal research
- Web scraping con python
- The evaluation of university teaching staff: how to deal with accreditation after the defence of the thesis
- How to register clinical and theoretical research protocols
- Digital tools and resources to survive in the humanities
- Basics for publishing your research from the perspective of a scientific journal editor and reviewer
- Introduction to statistical analysis with SPSS. Doctorate

- Scientific language and linguistic correctness for research papers
- The citation system in scientific publications
- Licences for the use of scientific information
- Association and hypothesis testing with SPSS
- Bibliography management with the new Mendeley reference manager
- Preparation of systematic reviews in the fields of biology and life sciences
- Multidimensional analysis with SPSS
- Present your research quickly and efficiently. Edition 1
- Present your research quickly and efficiently. Edition 2
- How to register clinical and theoretical research protocols
- General framework of the doctorate. Ed. 8. Doctorate edition
- Tips for publishing your research from the perspective of an associate editor of journals indexed in JCR
- Licences for the use of scientific information
- The citation system in scientific publications
- Basic communication skills for your presentations as a researcher
- Strategies to increase the visibility and impact of scientific production
- The citation system in scientific publications. Edition 2
- How to prepare, interpret and conduct a meta-analysis
- On-line tools for the elaboration of a systematic literature review
- Search for scientific information in the areas of science and engineering
- Search for scientific information in the areas of humanities and social sciences
- The first steps to spreading your research like a pro
- Get closer to the German language
- Digital resources for learning and research in the humanities
- Handling R as if it were SPSS for the thesis: introduction to R commander
- Challenges and responsibilities of the researcher in the face of the postulates of open science
- Introduction to qualitative research: fundamentals and methods
- Technical and personal tools for publishing in high-impact journals

From 2009-2010, the Faculty offered the Master of Research in Veterinary and Food Science and Technology. This was a one-year official Master in Spain, in which the number of students per year was 20-30. However, during the last years the interest for the Master has considerably decreased, as graduates in Veterinary have recognized the level of Master in Spain (Royal Decree 96/2014, of 14 February 2014, modifying Royal Decree 1027/2011, of 15 July 2011, which recognizes the level of Master (MECES level 3) to the Veterinary Degree, published in BOE on 5 March 2014). As the Master was oriented towards research and most of the students enrolling in the Veterinary and Food Sciences PhD programme are veterinarians, in recent years the demand to access the Master has decreased considerably. For this reason, in the current academic year (2023-24) the Master has begun its extinction process.

Of course, PhD students are trained and must carry out research studies under the supervision of the teaching staff. Therefore, at the FVULE, all postgraduate students must be registered for postgraduate research training.

FVULE has close relationships with public and private institutions and associations, with interest in veterinary, such as cultural associations, the Army, the Professional Colleges, the National Health Service, etc. Among the objectives of these relationships, it is worth noting the organisation of postgraduate courses and continuing education activities (Tables 10.3.3 and 10.3.4).

Standard 10.4: The VEE 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 study programme.

The FVULE has a member of the Dean's Office, the Academic Secretary, who is the QA coordinator of the Faculty and a member of the QA Committee of the Faculty. He was the coordinator of the Master and of its Academic Committees. The PhD Programme in Veterinary and Food Sciences has also and Academic Committees. Both committees are composed by teaching staff, students of the programme and stakeholders:

- Master Academic Committee. It is responsible for the defining and updating of the Master programme. It annually manages the student admission process, the course coordination, and the application of the QA system.
- PhD Program Academic Committee. Its mission is to evaluate the research plan and the activities of its doctoral students and to carry out an integral follow-up of the students' performance throughout their doctoral training. On an annual basis, it is responsible for the admission of students, the coordination of the activities and the application of the QA system.

In addition, both PhD and Master Academic Committees review the progress and results of the Thesis (PhD or Master) every year. They work together with the QA Committees of the Faculty and the QA Office of ULE to follow up on the Degrees. Periodically, regional, and national Quality Agencies evaluate the official postgraduate programmes.

Comments on Area 10

The FVULE has leading research groups that develop projects in practically the entire veterinary field. The quality of the research is reflected in different objective indicators (rankings, impact factors, etc.). Interaction between the teaching staff, researchers and the undergraduate and postgraduate students have been promoted to create and maintain a research interest in many of them. The requirement to develop a final Degree / Masters / PhD research project plays an essential role in the approach and training of students of all levels to research.

As mentioned above, undergraduate students have the possibility to start a research work in the Faculty through different scholarships This offer of scholarships is considered to be sufficient. However, as far as possible, the effort to involve students in the different lines of research being carried out has to be maintained in departments where research is actually being carried out.

Suggestions for improvement in Area 10

Despite the effort made in the last years to offer postgraduate research educational programs, the number of doctoral thesis presented in the last years is relatively low. Since the employability of veterinary graduates is high, it is difficult to recruit graduates interested in a scientific career. Although the doctoral thesis is a step in the long career to become a university professor, it is an option that should be encouraged, taking into account the high average age of Spanish University professors and the imminent need for their renewal.

Other than Doctoral studies, continuing education in the Faculty is not easy to increase, due among other reasons to the fact that the participation in continuing education is not mandatory to maintain the licence to practise as a Veterinarian. In any case, an effort should be made to increase the offer of postgraduate education, focusing both hard and soft skills.

ESEVT Indicators on the years 2020/2021, 2021/22 and 2023/2023

Name of the Establishment:		**Facultad de Veterinaria, Universidad de León**			
Name and mail of the Establisment's Head:		María Teresa Carbajo Rueda, fvedec@unileon.es			
Date of the form filling:		December 22th, 2023			
Raw data from the last 3 complete academic years		**2022-2023**	**2021-2022**	**2020-2021**	**Mean**
1	n° of FTE teaching staff involved in veterinary training	109	108	103	106.67
2	n° of undergraduate students	629	627	620	625.33
3	n° of FTE veterinarians involved in veterinary training	92	97	87	92.00
4	n° of students graduating annually	103	99	93	98.33
5	n° of FTE support staff involved in veterinary training	63	62	60	61.67
6	n° of hours of practical (non-clinical) training	1,068.6	1,068.6	1,068.6	1068.60
7	n° of hours of Core Clinical Training (CCT)	716	716	716	716.00
8	n° of hours of VPH (including FSQ) training	227.5	227.5	227.5	227.50
9	n° of hours of extra-mural practical training in VPH (including FSQ)	42	42	42	42.00
10	n° of companion animal patients seen intra-murally	6,376	4,896	4,036	5,102.67
11	n° of individual ruminant and pig patients seen intra-murally	625	613	561	599.67
12	n° of equine patients seen intra-murally	266	299	208	257.67
13	n° of rabbit. rodent. bird and exotic patients seen intra-murally	641	783	541	655.00
14	n° of companion animal patients seen extra-murally	48	47	14	36.33
15	n° of individual ruminants and pig patients seen extra-murally	28,937	15,338	1,522	15,265.67
16	n° of equine patients seen extra-murally	41	35	28	34.67
17	n° of rabbit. rodent. bird and exotic patients seen extra-murally	432	418	0	283.33
18	n° of visits to ruminant and pig herds	270	200	275	248.33
19	n° of visits to poultry and farmed rabbit units	65	75	95	78.33
20	n° of companion animal necropsies	210	179	286	225.00
21	n° of ruminant and pig necropsies	224	266	294	261.33
22	n° of equine necropsies	16	16	26	19.33
23	n° of rabbit. rodent. bird and exotic pet necropsies	264	186	256	235.33
24	n° of FTE specialised veterinarians involved in veterinary training	12	12	12	12.00
25	n° of PhD graduating annually	5	13	6	8.00

ESEVT Indicators on the years 2020/2021, 2021/22 and 2023/2023

Name of the Establishment:	Facultad de Veterinaria, Universidad de León
Name and mail of the Establisment's Head:	María Teresa Carbajo Rueda, fvedec@unileon.es

Calculated Indicators from raw data		**Establishment values**	**Median values**	**Minimal values**	**Balance**
I1	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students	0.171	0.15	0.13	0.045
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.936	0.84	0.63	0.306
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.627	0.88	0.54	0.087
I4	n° of hours of practical (non-clinical) training	1,068.6	953.50	700.59	368.01
I5	n° of hours of Core Clinical Training (CCT)	716.0	941.58	704.80	11.20
I6	n° of hours of VPH (including FSQ) training	227.50	293.50	191.80	35.70
I7	n° of hours of extra-mural practical training in VPH (including FSQ)	42.0	75.0	31.80	10.20
I8	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually	52.261	67.37	44.01	8.251
I9	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually	161.342	18.75	9.74	151.602
I10	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually	2.973	5.96	2.15	0.823
I11	n° of rabbit. rodent. bird and exotic seen intra-murally and extra-murally/ n° of students graduating annually	9.542	3.11	1.16	8.382
I12	n° of visits to ruminant and pig herds / n° of students graduating annually	2.525	1.29	0.54	1.985
I13	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.797	0.11	0.04	0.752
I14	n° of companion animal necropsies / n° of students graduating annually	2.288	2.11	1.40	0.888
I15	n° of ruminant and pig necropsies / n° of students graduating annually	2.658	1.36	0.90	1.758
I16	n° of equine necropsies / n° of students graduating annually	0.197	0.18	0.10	0.097
I17	n° of rabbit. rodent. bird and exotic pet necropsies / n° of students graduating annually	2.393	2.65	0.88	1.513
I18	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.122	0.27	0.06	0.062
I19	n° of PhD graduating annually / n° of students graduating annually	0.081	0.15	0.07	0.011


FACULTAD DE VETERINARIA