UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA
Facultad de Veterinaria

Self Evaluation Report
VETERINARY FACULTY ULPGC
2008

Presented by the Veterinary Faculty ULPGC
in October 2008,
Las Palmas de Gran Canaria (Spain)

Images and design:
Gabinete de Comunicación ULPGC

Printed:
Servicio de Reprografía y Encuadernación ULPGC

Self Evaluation Report
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2008

UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA
Facultad de Veterinaria

D. JOSÉ PESTANO BRITO, SECRETARY OF THE VETERINARY FACULTY OF THE UNIVERSITY OF LAS PALMAS DE GRAN CANARIA

CERTIFIES THAT:

The present document entitled ***Self Evaluation Report 2008*** has been approved unanimously by the Faculty Board on 24th September 2008.

This certify is signed on 25th September 2008.

José Pestano Brito
Secretary

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CHAPTER 0

Introduction

Please provide an outline of the main features of the history of the establishment in the period since the last evaluation visit or, if there has not been a previous visit, in the last ten years or so.

It should cover:

- The main organisational changes.
- New regulations relating to teaching.
- Main changes to the study programme.
- Important decisions made by the management of the establishment, or by the authorities responsible for it.
- Major problems encountered by the establishment, whether resolved or not.

The creation of the Veterinary Faculty of Las Palmas was published in the Official Bulletin of the Canarian Autonomous Community (BOC) on the 17th of October 1986, depending at that time on the University of La Laguna. Later, the re-alignment of the Veterinary Faculty to the then recently created University of Las Palmas de Gran Canaria (ULPGC) was published in the BOC on the 15th of September 1989.

The Veterinary Faculty is located in the Arucas campus of the ULPGC, in the north of the island of Gran Canaria, some 7 km from the capital city, Las Palmas de Gran Canaria. It is the only Veterinary Faculty in the Canarian Autonomous Community.

The first Full Evaluation Visit to the Veterinary Faculty in Las Palmas took place on 16-22 October 2000. The team's report included several suggestions regarding major deficiencies which implied that the training given at that time did not satisfy the requirements of Directive 1978/1027/EEC. The main deficiencies were related to a) intensive clinical training covering all major species and disciplines must be increased, b) caseload available for the clinical teaching of students must be increased, and c) access to animal material of different species for structured and controlled work on animal, carcasses and organ inspection techniques for food safety must be increased.

From 2000 until now, the Veterinary Faculty of the ULPGC has made important quantitative and qualitative advances.

Organisational changes

Following the recommendations made in the EAEVE evaluation of our Faculty in 2000, from October 2001 (provisionally) and from March 2004 (permanently) a collaborative working agreement between the ULPGC and the Canarian University Foundation of Las Palmas (FULP) was established to manage the **Veterinary Teaching Hospital (VTH).**

The VTH is now governed by a Management Committee, consisting of a President, Vice-president and five voices. The President is the Rector of the ULPGC and the Vice-president is the President of the Social Development Council (*Consejo Social*). The voices are chosen

as follows: the Manager of the ULPGC, the Dean of the Veterinary Faculty, the President of FULP, the Manager of the FULP, and one member of the Social Development Council representing the social side. The VTH has an external Managing-Director to manage the VTH activities, and its administrative and economic tasks, as well as the staff needed for these tasks. He also acts as secretary of the Management Committee.

This restructuring of the VTH has allowed a specific relevant budgetary contribution, making it possible to contract various veterinary surgeons, having a positive affect on the increase in caseload, particularly in the case of horses. In addition, a recent collaboration agreement established between the Official Veterinary College of Las Palmas, the ULPGC, the FULP and the Island Animal Sanctuary (*Albergue Insular*) has allowed a notable increase in the number of cases of small animals. Through this agreement, the Official Veterinary College of Las Palmas makes an annual economic contribution which covers part of the costs of the medical-surgical costs of the animals in the sanctuary at the VTH.

With the aim of becoming a reference point at regional, national and international level in terms of animal health and food safety, the Canarian Government created the **University Institute of Animal Health and Food Safety** (*Instituto Universitario de Sanidad Animal y Seguridad Alimentaria-IUSA*) in 2002. This institute is made up of five divisions of research at the Veterinary Faculty: Pathological Anatomy, Epidemiology and Preventive Medicine, Animal Reproduction, Aquaculture and Marine Genetics, and Infectious Diseases and Ictiopathology. As well as its research purposes, currently two doctorate programmes are being taught, which have received a quality mention from the Spanish Ministry of Education and Science.

The ULPGC has carried out an organisational restructuring of the different libraries of the different University centres, integrating them as thematic libraries depending on the General Library of the ULPGC.

New regulations relating to teaching

A new curriculum was established after the 2000 EAEVE evaluation. The current curriculum was defined and structured by the ULPGC in accordance with: (1) the Royal Decree (RD) 1497/1987, dated 27 November dictated from the Spanish Ministry of Education and Science outlining the *"Common General Guidelines of Curricula Leading to Official University Degrees"* and subsequent amendments

(RD 1267/94, RD 2347/96, RD 614/97, RD 1561/97, RD 779/98 and RD 1651/98), (2) the RD 1394/1991, dated 30 August that state the "*Specific Guidelines*" referring specifically to the curriculum leading to the Official University Degree in Veterinary Science to its granting, and (3) the European Community Directive 78/1027/EEC, dated 18 December 1978 (which has since been replaced by Directive 2005/36/EU).

As a result of the process of the construction and adaptation to the European Space for Higher Education (ESHE), initiated with the Bologna Declaration of 1999, the Spanish Ministry of Education and Science published the latest **University Organic Law (LOU)**, dated 21 December 2001. This Law introduced important changes in the structure of the different University bodies, defining new types and new systems of access to the academic posts. It also established mechanisms for quality assurance in teaching and research through the creation of the Spanish Agency for Quality Assurance and Accreditation (ANECA). The Law also provided for students and teaching staff mobility and many aspects regarding integration in the ESHE.

To adapt to the LOU, in 2003 the new **ULPGC Statutes** were published (Official Bulletin of the Canarian Autonomous Community BOC, 22 April 2003) regulating the organisation and operations of the University of Las Palmas de Gran Canaria.

The LOU has been recently modified, Modification Law of the University Organic Law (LMLOU), 4 April 2007, establishing two cycles, graduate and postgraduate, in higher education. More recently, new regulations such as the RD 1393/2007, 29 October 2007 (defining the new regulation for the Official Spanish Higher Education Studies replacing the RD 1497/1987), the Order ECI/333/2008 (defining the general conditions of the Veterinary Degree), and the Canarian Autonomous Government Decree 168/2008, 22 July 2008 (regulating the adaptation of the new University Degrees of the Canarian Universities to the ESHE) have been published. Therefore, the current curriculum is nowadays under revision due to these new regulations.

New buildings or major equipment

Many significant advances were implemented from 2000 until now:

- As stated previously, several well equipped laboratories integrated in the University Institute of Animal Health and Food Safety (IUSA) have been created.

- A new building including Experimental Animal House and Experimental Surgery has been very recently built.
- Following the recommendations made in the 2000 EAEVE evaluation a Food Processing Pilot Plant was built in 2007.
- New Freezer Chamber.
- Building of a second computer room and renewal of computers.
- Installation of a new waste treatment plant (biological and chemical).
- Parking.
- Creation of the Plastination Laboratory integrated into the dissection room in the Anatomy department.
- Renewal of the microscopes of the communal laboratories.
- Installation of computer equipment in every classroom with a digital projection system.
- Installation of a Wi-Fi system with coverage in all the Faculty and VTH.
- Computerisation and adaptation of the Library to the new IT technologies/resources.
- Loan service of laptop computers in the library.
- Air-conditioning in the study room.
- New VTH Equipment (Ultrasound Toshiba Nemio 17, Ocular Ultrasound Alcon Ultrascan, Electroretinograph Bio-Medicale, Endoscope Fujinon EVE Processor EPX-201, Rinoscope, 2 wall Anesthesia equipments, mobile Anesthesia equipment, 5 Infusion Pump Infusomat Braun, 2 Syringe Perfusor Perfusomat Braun, 2 Multiparametric Anesthesia Monitors, 2 Wwlch Allyn Wall Ophtamoscope and Otoscope, Electrocardiograph Cardioline Delta 1 plus, Doppler Blood Pressure Parks, Hematological Analyzer LaserCyte Iddex, Biochemistry Analyzer VetTest Iddex, Hormonal Analyzer SNAP Reader Iddex, Electrolite Analyzer VetStat Iddex, Multiple Microscope with 3 positions, Autoclave Matachana, Autoclave Statim 50005, 5 computers).

In addition, there are also further projects that are being carried out at this time or that have been approved to start during the next months:

- Adaptation of buildings to accommodate the physically handicapped.
- Construction of an adequate unloading bay for large animals in the VTH.
- Replacement of the floor of the library.
- Redesign of the boxes of the VTH.
- Riding Area for horses.
- Opening of a Magnetic Resonance Imaging Service in the VTH.

More details on all the buildings and equipment are given in Chapter 6.

Changes to the study programme

As stated previously, a major modification has been the implementation of a new curriculum since the 2000 EAEVE Evaluation. The curriculum was verified and approved by the Ministry of Education and Science, dated 14 July 1999, subsequently approved by the ULPGC 20 December 1999, and published on the Spanish Official Bulletin (BOE) on 20 January 2000. It started in the academic year 2000/01, and it was completely modified in October 2004.

As an example of the important changes derived from the new curriculum implementation in 2000, the theoretical activity has decreased by 11.55 % per student (from 2,055 hours of lectures and seminars in the former curriculum to 1,817.5 hours in the new curriculum) and the practical activity has increased by 46 % per student (from 866 hours in the former curriculum to 1,265 hours in the new curriculum). In addition, the clinical work has increased by 149.1 % per student (from 170 hours in the former curriculum to 423.5 hours in the new curriculum). In addition two important core subjects were included in the new curriculum: *Pre-professional Training I* and *Pre-professional Training II*, with a total of 150 hours.

Important decisions made by the management of the establishment, or by the authorities responsible for it.

In the last few years we have carried out a restructuring in the number of practical groups in different subjects. As was stated by the evaluation team of the EAEVE in their visit in the year 2000, all the subjects of the first and second year courses had five fixed practical groups with approximately 15 students in each group, whereas the subjects of the third, fourth and fifth year courses had 15 groups with approximately five students each. The restructuring carried out has implied that each subject (independent of the year in which it is taught) has a number of practical groups in function of the type of practical to be taught (computer room, laboratory or clinic), adjusting to the requirements of the EAEVE and of the ULPGC (15-20 students in practicals in the computer room, 8-15 students in microscope practicals, 8 students in laboratory practicals, and 5 students in clinical practicals and clinical practical visits). The changes have implied a notable increase in the total quantity of practical teaching given by the teaching staff.

In order to complete the teaching in the slaughterhouse of the island was necessary to implement since November 2005 an agreement between the University and the Canarian Health Department (*Consejería de Sanidad del Gobierno de Canarias*) because the authorised veterinarians in the slaughterhouse depend on this Department. In addition, two veterinarians of the slaughterhouse were contracted as teaching staff of the Faculty (partial time).

The limitations for possible growth of the current farm of the Veterinary Faculty have given rise to the signing of a collaboration agreement with the Cabildo Insular de Gran Canaria for the temporary accommodation of farm animals in the facilities of the Experimental Farm of the Cabildo, annex to the Faculty.

The Dean's team has also recently actively promoted the participation of different subjects in new teaching methodologies and the adaptation to the ESHE through participation in pilot projects of adaptation to the ESHE and experimentation with ECTS credits. At the time of writing this report the first and second year courses are being taught using this methodology, as well as numerous subjects from other years' courses, with the annual incorporation of the other years' courses being planned. This has enabled the experience of the Veterinary Faculty to be, in this sense, greater than that obtained in other centres of the ULPGC.

The Dean's team also recently set up an internal reflection by way of a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) leading to the composition of the Veterinary Faculty Strategic Plan 2008-2010, which is intended to be an element of improvement of the Faculty (more details are given in Chapter 1).

Major problems

The major problems encountered by the Faculty during the past ten years can be summarised as follows:

- Although the total of teaching staff expressed as Full-time Equivalents (FTE) has increased notably since the 2000 EAEVE evaluation (78 FTE in the year 2000 and 97.34 FTE currently) the increase in teaching practise as a result of the application of the new curriculum means that teaching staff are scarce in some areas of knowledge. In addition, as is reflected in the *Teaching Report* which the Dean compiles every year detailing the numbers of hours taught by each member of staff, the distribution of hours of the teachers in different areas of knowledge is very unequal. At the time when the University was growing and it was easier to obtain contracts for new teachers,

the Centre did not have a teaching report, and this allowed an unequal growth of staff in some areas. Nevertheless, currently the economic limitations of the ULPGC and the Contract-Programme established with the Canarian Autonomous Government make contracting new staff difficult, in spite of this tool to clearly illustrate real necessities.

- The level of autonomy of the Veterinary Faculty to make investments in infrastructures (buildings, works and installations) is practically non-existent because of economical and functional reasons (details given in Chapter 3).

- Although the previously referred to restructuring of the VTH has brought with it a variety of positive aspects, also previously outlined, the current organigram of the VTH makes it difficult for the Veterinary Faculty to play a pivotal role in taking strategic decisions which allow initiatives to be developed which affect teachers that are considered important from the Veterinary Faculty.

CHAPTER I

Objectives

1.1. FACTUAL INFORMATION

Indicate whether there is an official list of the overall objectives of the Faculty.
In this case, please indicate these.

- Who determines the official list of objectives of the Faculty?
- By what procedure is this list revised?
- Do you have a permanent system for assessing the achievement of the Faculty's general objectives? If so, please describe it.

If there is no official list, please indicate the objectives that guide the Faculty's operation.

1.1.1. General Objectives of the University of Las Palmas de Gran Canaria

The general objectives of the University of Las Palmas de Gran Canaria (ULPGC) come from the mission statement of ULPGC defined in the Statutes of the University (Official Bulletin of the Canarian Autonomous Community BOC, 22 of April 2003) in article 3.

The mission of the University is centred on the development of teaching activities, research and service to society. Therefore, the University promises the following:

1. Spread knowledge through quality teaching, in line with the specific objectives of all degrees, and whose content corresponds to both the development of knowledge as well as the demands of the work market. This undergraduate teaching is complemented with postgraduate teaching and specific lifelong training teaching.

2. Make advances in the innovation and critical development of knowledge through support for research in different fields of experimental sciences, health sciences, social sciences, humanities and technology.

3. Orientate the resources of the University and the professional experience of the teaching staff and support and administration staff to society with the aim of satisfying its demands, collaborating in problem solving and attending its needs.

The University will extend the development of its activities on an international and global level through the University network and bilateral agreements with the aim of becoming a meeting place between fellow universities in Europe, nearby African countries and Latin America. In the development of these activities, the University will give priority to those questions which affect in a general way the present and the future of the Canary Islands, to a global improvement in the quality of life of its people, and the execution of a sustainable development for the archipelago.

In article 4 the general objectives which guide the actions and development of the ULPGC are outlined:

1. To improve the efficiency and quality of the teaching and research work of the staff, creating conditions and an appropriate intellectual environment to encourage, support and retain excellent academics, both national and foreign. This promotes the interchange of ideas and information between traditional disciplinary boundaries.

2. To update undergraduate, postgraduate and continuous training programmes, and to develop other new ones with the aim of covering the current necessities and planned future of society. In this sense, the study programmes are orientated towards a better development of communication capacity, critical thought, acceptance of the different perspectives and sensitivity to social, ethical and political problems. In this way, the student is prepared to carry out his professional duties in an increasingly wide environment which is interdependent culturally, economically and in terms of knowledge.

3. To oversee basic and applied research in all fields of knowledge to obtain development of knowledge in cultural, social, scientific, technological and economic fields which reach Canarian, national and international levels of competence. The research should serve as a way of advancing, in a critical spirit, the solution of social, cultural and economic problems that society demands.

4. To collaborate actively with public administration, companies and other public and private institutions by providing specialised services such as the creation of debates and discussion forums, establishing the guidelines for subjects of public interest and the organisation of cultural and artistic events. At the same time, ULPGC is also a repository of cultural inheritance.

5. To develop activities in all the islands of the archipelago where demand justifies, and resources permit. This action shall be co-ordinated with the Autonomous Government and institutions of the island government.

6. To promote the right of all individuals to further education according to their merits and capabilities, whilst analysing and where necessary correcting the factors which indicate a possible academic failure.

7. To maintain, create and develop the infrastructures necessary for the development of the mission statement according to the technological changes and its own needs.

8. To negotiate with public administration the adequate levels of financing which permit the maximum functioning of the institution and coverage of its missions designed to bring about the development, the application and the transfer of knowledge and technology. At the same time, to stimulate the initiatives of teachers and researchers, intending to increase and diversify the sources of finance through agreements and collaborations with private and public entities to carry out studies, projects, etc. without decreasing the entrusted teaching activities.

9. To optimise our own services and administrative operations, including even privatisation when the externally offered price and quality is superior to that which the University can offer. Under no circumstances can the policy of privatisation of services directly affect the teaching, research and its administration.

10. To develop an incentive system for University staff appropriate to their level of productivity, thus improving overall social benefits.

11. To improve the image, reputation and public awareness of society towards the University as a centre of further education, of research, of cultural resources and of services adapted to society.

12. To promote the creation of 'business nurseries' (*viveros de empresas*) with the aim of incentivising business initiatives of University graduates.

13. The ULPGC will establish institutional evaluation plans which will allow it to verify the fulfilment of the objectives derived from the mission statement. From these results, it will put into place regulatory measures which will allow it to improve its activities.

1.1.2. General Objectives of the Faculty

Recently the Veterinary Faculty of ULPGC approved its ***Strategic Plan 2008-2010***, a document which outlines a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) of the Faculty, its mission and vision statements and the corresponding Strategic Plan for the period 2008-2010. This document was passed in the ordinary session of the Faculty Board.

The document outlines the following as its **mission statement**: *The Veterinary Faculty of ULPGC is a centre of further education, unique in the Canarian archipelago, committed to teaching quality and veterinary training. The Veterinary Faculty of ULPGC aims to offer adequate answers to the demands of Canarian society in questions that refer to animal medicine, animal health, public health, the food production sector, animal production in arid zones, Aquaculture and marine environment, in collaboration with other institutions, in a show of respect for nature and the animal world through the training of qualified professionals, research, and offering the most up to date services and quality.*

And the following as its **vision statement**: *The Veterinary Faculty of ULPGC would like to be recognised in the future as a platform of veterinary training beyond the archipelago, being a southern border for the European Union and a bridge between Africa, Europe and Latin America. We aim to be centre of reference in terms of teaching, research, and offering veterinary services in the archipelago, recognised inside and outside the Canary Islands for the professional excellence of our graduates and excellence in competitive lines of research.*

Both documents include implicitly the general objectives of the Veterinary Faculty which control our actions.

There is another recently written document, the ***Veterinary Faculty Quality Guarantee System***, currently being revised by the relevant national organism (ANECA), in which the draft copy (given that the document is not official until it has been approved by ANECA) explains the Veterinary Faculty Quality Objectives. The commission charged with writing and annually revising the Quality Objectives is the Quality Commission of the centre.

1.1.3. Specific Objectives of the Faculty

According with the European Directives (78/1026 and 78/1027/EEC, which has been seen replaced by Directive 2005/36/EU) and current Spanish legislation (Law of Health Professions 44/2003-BOE, Spanish Official Bulletin 22 November 2003; and the Spanish Specific Directive for Veterinary Studies, Royal Decree 1384/1991, BOE, Spanish Official Bulletin 30 September 1991) and recommendations for veterinary education, the specific goals of the Veterinary Faculty of the ULPGC are to provide adequate knowledge and professional skills to warrant animal and human health by means of:

1. Recognition, diagnosis, prevention, basic treatment (surgical or medical) and prognosis of common diseases of animals and to alleviate their pain and suffering.

2. Knowledge of international, national and regional legislation and procedures that should be applied to notifiable or zoonotic diseases.

3.Contribution to the improvement of animal production whilst maintaining the promotion and safeguard of animal welfare, animal husbandry, reproduction and feeding.

4.Contribution to the economically feasible production of healthy and safe food products of animal origin, with the lowest environmental impact and safeguarding animal welfare, including sustainable production.

5. Contribution to public health by means of the development of policies, guidelines, operational procedures and strategies for the control of zoonotic and foodborne diseases.

6.Contribution to the development of legislative and administrative principles related to the veterinary profession and public health.

1.1.4. Methods Used to Measure the Achievement of the Objectives

The methods used to evaluate and adapt the objectives established by the Faculty rely mainly on the quality of the teaching and also on the students' satisfaction with this teaching. Students are asked to participate in a survey about the teaching of each individual teacher.

The methods used are established by the University:

a) Annual questionnaire about the teachers' activities. In this survey, students give their opinion about various aspects of the teaching activities, such as the teacher's knowledge and mastery of his subject, his ability to make himself understood, and other parameters that help measure the teaching quality of each individual teacher. These questionnaires are assessed by the Vice-Rector of Quality and the results and conclusions are sent to the individual teachers and lecturers, to the different departments and to the Faculty so as to take them into account and make the necessary corrections in those aspects that need to be improved.

b) There is also an evaluation of the research activity of the staff every six years, with economic consequences through retributive complements.

c) There are external assessments of a teacher's personal and individual teaching and research work which are requested from the Spanish Agency for Quality Assurance (ANECA) and/or from the Canarian Agency for University Quality Assurance (ACECAU). The first agency awards an Evaluation of Teaching and Research Quality valid all over Spain, while the second is valid for the entire Canarian Autonomous Community. These can be voluntarily requested every six years for professors having tenure and once approved will ensure an increase in salary.

With respect to the specific methods we are using to assess how well our objectives at the Veterinary Faculty are being fulfilled, we have a **Teaching Affairs Committee (CAD)** (*Comisión de Asesoramiento Docente*), which is appointed by the Faculty Board. This committee meets periodically (3-4 times a year) to analyse and evaluate problems related to the curriculum, teaching methodologies, fulfilment of practical classroom activity goals and any other questions related to teaching. The Faculty also has the authority to organise the teaching requirements of every subject as far as class timetables and final examination calendars are concerned. The schedules are annually prepared and established by the Faculty Board and must take into account the Annual Teaching Plans, as deemed necessary by the Vice-Rector of Academic Management. The Annual Teaching Plans are based on the number of hours of class necessary for students to comply with the minimum time each student should spend in the Faculty as required by the present curriculum and syllabuses.

The ***Veterinary Faculty Quality Guarantee System*** document, currently being revised by the relevant national organism (ANECA), includes a chapter called ***Training Results*** in which the draft (given that the document is not official until it has been approved by ANECA) outlines that the Veterinary Faculty guarantees that it measures and analyses the results of learning, of incorporation into the job market and the satisfaction of interested parties, as well as showing how decisions are taken based on the results to improve the quality of teaching under its control. The following procedures have been developed to this end:

- Procedure for the writing and revision of policy and quality objectives.
- Procedure of training offers.
- Procedure for planning and development of teaching.
- Procedure for measurement, analysis and improvement.
- Procedure of public information.
- Procedure for the control of academic results.
- Procedure of support for satisfaction, expectations and necessities.
- Procedure for revision and improvement of qualifications.
- Procedure of management of incidents, complaints and suggestions.

1.2. COMMENTS

In your view, to what extent are the objectives achieved?

What, in your view, are the main strengths and weaknesses of the Faculty?

The training objectives of our Veterinary Surgeons are currently being met for the most important facets of the Veterinary profession, such as Animal Medicine, Animal Production, Hygiene and Food Technology. They are also being fulfilled for the various aspects of biological and biomedical scientific training which are needed for a proper practice of the characteristics included in the recommendations enumerated by FVE, EAEVE (Newsletter number 9, 2000) and by the European Project VET2020.

In the SWOT analysis included in the Veterinary Faculty Strategic Plan 2008-2010 the major strengths and weaknesses were outlined in the following sectors: Teaching, Research, Management and Services, and Social Impact:

STRENGHTS	
Teaching	The youth of the teaching staff (average age 43) has added value for the impetus and self motivation of young staff.
	The Faculty has a high number of well equipped laboratories.
	The progressive adaptation to the ESHE (over the last two years) will allow greater knowledge in the design of undergraduate degrees. The experience is in this sense greater than that obtained in other centres of ULPGC.
	The practical groups are small allowing quality practical teaching. The staff are conscious of the need to maintain small practical study groups although it requires greater teaching effort.
	The Faculty has excellent relations with the Canarian Veterinary College Board, which has a positive impact of teaching aspects (co-organisation of courses, library agreement, etc.).
	The Faculty has excellent relations with nearby institutions (the Experimental Farm of the Cabildo de Gran Canaria, the Insular Animal Sanctuary, the Canarian Government School of Agrarian Training, the Canarian Institute of Marine Sciences) which has brought about agreements and contracts for teaching staff.
	The level of collaboration with consultancies, clinics and veterinary hospitals is very satisfactory, allowing students the chance to carry out summer practices and/or work experience.
	The availability of the Faculty Farm gives high value practical experience for students.
	The core subjects *Pre-professional Training I* and *Pre-professional Training II* represent contact with professionals in the sector, allowing students direct contact with the reality of work in the profession.
	The organisation of academic activities in the VTH allows student contact with clinical activities they will carry out as professionals.
	The availability of teaching laboratories in the Canarian Institute of Marine Sciences (not available in any other Spanish Veterinary Faculty) gives high value practical experience for students.
	The development of Erasmus and SICUE/Seneca exchange programmes bring an academic and cultural enrichment for our students.

STRENGHTS	
	The widespread use of the virtual campus as a support to face to face teaching has increased the possibility of interaction between students.
	The development of the "*Academic Management*" application has meant a higher level of organisation of academic activities in the Veterinary Faculty.
	The good relationship between the teaching staff and farming, food and aquaculture companies, as well as with the Island and Autonomous Region Administration helps students have the chance to carry out practicals.
	The specialisation in goats, camelids and in various fields of the clinical medicine of pets is a notable teaching element.
	The specialisation of around 20 % of the teaching staff in marine animals and aquaculture is a notable teaching element compared to other Spanish veterinary faculties.
Research	In the Faculty there are various groups and reference laboratories which lead, at national and international level, lines of research on clinical medicine, production and health of species (marine animals, goats, camelids) connected to our subtropical geographical location.
	The integration of some research groups in the University Institute of Animal Health and Food Safety (IUSA) allows us to gather together specialised human resources, maximising them for research groups at the Faculty and strengthening their competitiveness.
	The collaboration of the CIDIA-FEAM (Instrumental Centre Physic-Chemistry for Development of Applied Research) of the ULPGC allows the development of specific lines of research.
Mana gement & Services	The availability of the Faculty Farm and the Marine Science Institute make possible the development of different lines of research which require animals in production conditions.
	The European evaluation processes which the Veterinary Faculty periodically undergoes are in part a stimulus for internal improvement, and in part a tool for the ULPGC management in the division of resources.
	Commitment from the Dean of the Faculty assumed by the teachers to write and publish the *Annual Activities Report*.
	Commitment from the Dean of the Faculty to write and publish the *Annual Teaching Record*.
	Commitment of the Veterinary Faculty in the creation of the Quality Commission to write and develop the *Veterinary Faculty Quality Guarantee System*.
	Existence in the Faculty of services of recognised prestige at national and international level.
	A notable annual investment of the ULPGC in the Veterinary Teaching Hospital (VTH) which allows the maintenance of this structure of the veterinary degree.

STRENGHTS	
Social Impact	The participation of the Veterinary Faculty (and its teachers) in agricultural shows, congresses, courses, scientific organisations, and other acts related to the profession contribute to the social impact of the Faculty.
	A high level of interest from local media for activities of the ULPGC in general, and of the Veterinary Faculty in particular.
	A high number of activities organised in recent years in the Veterinary Faculty and spread by the Vice-Rector of Culture to the whole university community.
	The Erasmus and Seneca student exchange programmes allow our Faculty to be known by students of other faculties.

WEAKNESSES	
Teaching	The distance to mainland Spain and continental Europe makes the exchange of teachers and students with other universities difficult. It also involves higher costs for the acquisition of products and services for the functioning of the Faculty, e.g. the cost of farm animal food, supplies and maintaining laboratory equipment, etc.
	The segregation of the teaching staff in various campuses (San Cristóbal, Tafira, Taliarte, etc.) does not allow all the staff to be integrated into the Faculty and makes it difficult for students to access them.
	There is a marked inequality in teaching staff dedicated to different areas of knowledge, as well as a smaller teaching staff compared to other Spanish veterinary faculties.
	The high number of laboratories in the centre does not correlate with the lack of support staff, which forces us to rely on personnel from other departments, which is also insufficient.
	The current organigram of the VTH makes it difficult for the Veterinary Faculty to be determinant in taking strategic decisions which allow for the development of initiatives which are considered important by the centre and which affect the teaching.
	The physical space of the Veterinary Faculty is, in general, limited, not counting the installations adequate for adaptation to the ESHE.
	The lack of a pig farm, a poultry farm and a dairy farm as our own installations makes teaching difficult in the corresponding areas.
	The installations of the Faculty and its access are not adapted for physically handicapped people, some roads do not even have tarmac, and an integral urbanisation as a campus is necessary. Neither are there any sports facilities.
Research	The lack of knowledge of activity between different research groups in the Faculty and their low level of collaboration prevents maximising human resources and infrastructures.
	The high demands of teaching in some areas of knowledge limit the possibilities of dedication to research.
	The lack of economic resources makes it difficult to carry out research in non-priority areas.

WEAKNESSES	
Management & Services	The Faculty on numerous occasions has to assume inherent costs due to the placement of the Faculty in an isolated campus. This single campus situation is not considered by the University Management in the allocation of their budget.
	The high cost of maintenance of the farm (an important percentage of the Faculty budget) is not given any special dispensation in the budget by the University Management.
	The structure of the University means that in important areas such as infrastructure and investments plans, etc., the Faculty has virtually no management control.
Social Impact	The isolation on campus as well as the relative lack of weight of numbers (482 students out of a total of 21,320 students in all the ULPGC), affects the quality of cafeteria service and makes offering other services such as printing impossible.
	There is still a great lack of general public knowledge about the different activities a veterinary surgeon carries out professionally.

1.3. SUGGESTIONS

If you are not satisfied with the situation, please list your suggestions for change in order of importance and describe any factors which are limiting the further development of your Faculty.

To address some of the problems mentioned above, the Faculty suggests:

1. A dairy, pig and poultry farm. The Faculty has already launched an ambitious project in collaboration with the Cabildo de Gran Canaria, making it possible for the Faculty to have these installations permanently. This project was presented to the Rector at the end of 2007 and is being studied.

2. The adaptation process to the *European Space for Higher Education* (ESHE) shows the need for small classrooms for group work, seminaries and tutorials. These are needs in common with the majority of centres at the University, which requires that the Investment Plan consider this problem.

3. An increase in support staff for teaching and research.

4. To develop a progressive plan of amendment of the teaching inequalities in different areas of knowledge, by means of the incorporation of new staff in the most deficient areas.

CHAPTER II

Organisation

2.1. FACTUAL INFORMATION

Details of the Faculty

Name of the Faculty:
Veterinary Faculty. University of Las Palmas de Gran Canaria (ULPGC).
Address:
Trasmontaña s/n.
35413 Arucas (Las Palmas).
Telephone: *00 34 928 454333*
Fax: *00 34 928 451130*
Website: *http://www.fv.ulgpc.es*
E-mail: *admon_dec_fv@ulpgc.es*
Title and name of head of the Faculty:
Dr. Jorge Orós Montón
Is the Faculty within a university? *Yes*
Address of the university:
University of Las Palmas de Gran Canaria.
C/ Juan de Quesada, nº 30.
35001 Las Palmas de Gran Canaria
Competent authority overseeing the Faculty:
Ministry of Science and Innovation (Ministerio de Ciencia e Innovación – MCI; formerly named Ministry of Education and Science-MEC), and Education Department of the Canarian Autonomous Community (Consejería de Educación de la Comunidad Autónoma de Canarias)

Indicate the rules concerning the appointment of the elected officials of the Faculty (Dean, Vice-Dean, Heads of Department, etc).

The Dean is elected by the Faculty Board (*Junta de Facultad*) as per Article 107 of the ULPGC Statutes and as per Article 17 of the Veterinary Faculty Regulations. He/she must be a tenured teacher with a full-time position and must be willing to hold this position for a five-year term. The Dean may be re-elected only once.

The Dean's Executive Team is proposed by the Dean and after the Dean is elected, they are appointed by the Rector (as Articles 109-110 of the ULPGC Statutes dictate). They may be introduced by the Dean before the election, or the Dean may choose to make their names known after the election has taken place.

The Heads of Department are elected by the Department Council from among all the PhD-holding members of the Department as per Articles 97-98 of the ULPGC Statutes. The head of Department hold his/her position for a five-year term and may be re-elected only once.

Provide a diagram of the administrative structures showing the Faculty in relation to the University and Ministerial structure of which it is part.

The ULPGC is a public University that depends on the Spanish Ministry of Science and Innovation (MCI) (formerly named Ministry of Education and Science-MEC), on a national level, and also on the Canarian Government's Department of Education on a regional level. The MCI establishes the curriculum for all nationally recognised degrees, and defines the main political lines of higher education in Spain. The Department of Education of the Canarian Government is the body responsible for funding and managing the two Canarian Universities. Figure 1 summarises this interrelation.

Provide a diagram of the internal administrative structure of the Faculty itself (councils, committees, departments, etc.).

Describe, briefly, the responsibilities, constitution and function of the main administrative bodies (councils, committees, etc.).

Organisation of the Veterinary Faculty

Current legislation (LOU) divides and defines the organisation of the Universities in Spain into two entities with different specified functions:

- **Faculties and Schools:** Responsible for organising teaching and supervising the correct development of teaching activities.
- **University Departments:** Mainly responsible for research and undergraduate and postgraduate education.

The Veterinary Faculty is the only centre responsible for teaching of the Degree in Veterinary Science in the Canarian Autonomous Community. The Faculty organises the veterinary curriculum and assigns the teaching of the subjects needed to the Departments. The Faculty also supervises undergraduate teaching and implements the Quality Assessment Programmes. The Departments must develop the teaching duties assigned by the Faculty. Along other lines, the Departments may request new academic positions at the University and organise the hiring of new teaching staff. Figure 2 summarises this structure.

The Veterinary Faculty is governed primarily by the Statutes of the ULPGC (2003), and by its own Veterinary Faculty Regulations (*Reglamento de Régimen Interno*) (2004). All the information as regards these Regulations is addressed on the Faculty website (http://ww.fv.ulpgc.es/ficheros/reglamento.pdf). The ULPGC Statutes stipulate the composition, structure, and functions of the Governing Bodies of the Faculty as well as those of the administrative and general services of the ULPGC itself.

Government Bodies

A. The Veterinary Faculty

The Governing Bodies defined in the ULPGC Statutes are: the Dean, the Dean's Executive Team, and the Faculty Board.

The Dean holds the highest representation of the Faculty and acts as Director and day-to-day Manager.

The Dean's Executive Team is comprised of Vice-Deans with delegated functions for specific academic activity areas. At present there are three Vice-Deans: a) Teaching Affairs; b) Students and Exchange Programmes, and c) Animal Collectives, as well as a Secretary who is responsible for the editing and signing of official reports and certificates. The Faculty also has a Managing Director who is a Civil Servant and is responsible for the Academic management of all issues related to the Faculty. She works in close, daily contact with the Dean. There is also an Administrative Secretary who is a Civil Servant.

The **Faculty Board** is the Managing and Governing Body of the Centre. It is composed of representatives from all levels of the Institution. According to the Statutes of the ULPGC and the Veterinary Faculty Regulations, the Faculty Board is composed by the Dean, the Secretary, a 60 % of the teaching staff (so that all teaching civil servants registered in the Veterinary Faculty are members of the

Faculty Board, constituting at least 51 % of all members), 36 % of undergraduate students and 4 % of support staff.

The representatives for the non Civil Servant teachers, undergraduate students, and support staff are elected by suffrage within the given group. Elected members hold the seat for a five-year term except for the representatives of the undergraduate students which hold the seat for two and a half years. The renewal of possible vacancies is done annually.

The Faculty Board meets at least once every three months.

The main functions of the Faculty Board are:

- Organising and develop teaching and academic and administrative processes and management of Veterinary qualifications.
- Establish general objectives and the profile of the formation of qualifications.
- Approve the study plan.
- Approve the degree teaching plan. Approve the teaching projects sent by each department.
- Approve the programme of activities in place to achieve the integrated teaching of students.
- Approve, liquidate and publish the budget of the centre at the end of the economic year.
- Develop and modify its own rules, subject to its approval by the ULPGC Government Board.
- Approve and publish a list of its activities.
- To choose and deselect the Dean.
- Co-operate with the promotion of student mobility.
- To see to the needs of the centre in terms of physical space and material matters.
- To suggest the needs of the centre in terms of administration staff and services.
- To suggest to the Rector to abide by agreements and collaboration contracts with public or private entities, or with individuals.

Committees Delegated by the Faculty Board

To improve the assessment of different aspects of the Faculty management, the Faculty Board appoints nine Delegated Committees.

1) ***Teaching Affairs Committee (CAD).*** The composition and function of this committee are regulated by the General Rules of the ULPGC. This committee is made up by 60 % teachers, with

representatives of all the areas of teaching expertise and 40 % students. The committee meets at least twice every four months.

2) ***Animal Collectives Committee***. This committee is made up of all the teachers in the area of Animal Production, two teachers from the Reproduction and Obstetrics unit, one teacher from the area of Animal Health, two members of the support staff linked to the farm, the Head of the Department of Animal Pathology and the Dean's Executive Team. The committee plans teaching and research needs on the Faculty farm and in entities which have a working agreement of teaching collaboration.

3) ***Exchange Programme and Academic Recognition Committee (CPIRA).*** This committee is chaired by the Vice-Dean of Students and Exchange Programmes, and is made up of eight teachers and one student. The committee is in charge of the academic recognition of the students chosen in different mobility programmes and the revision of the different existing bilateral contracts.

4) ***Extramural Practices Committee***. This committee is made up of those teachers who tutor students enrolled in core subjects *Pre-professional Training I* and *Pre-professional Training II*. It is currently made up of 27 teachers and one student.

5) ***Library Committee***. This committee is made up of the Dean, the librarian, six teachers distributed accordingly: Biochemistry, Molecular Biology, Physiology and Immunology departments(1), Clinical Sciences department (1), Morphology department (1), Animal Pathology, Animal Production, Bromatology and Food Technology department (3), and six student representatives. Its function is to analyse the material needs of the library for the teaching staff and/or research. The Committee meets at least once a year.

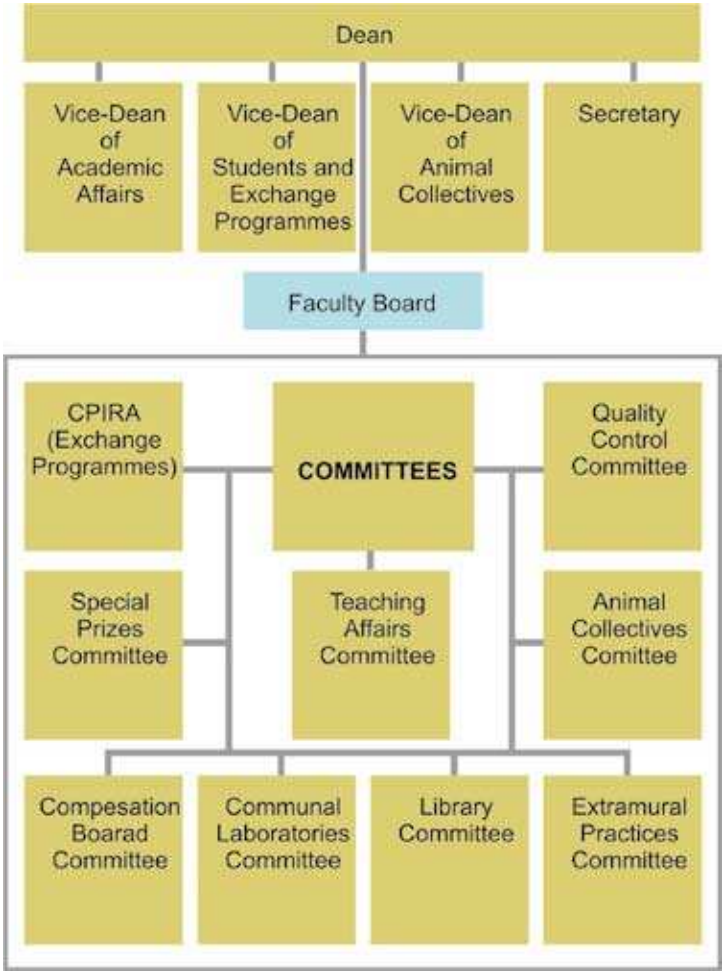
6) ***Communal Laboratories Committee***. This committee is currently made up of the Dean, 11 teachers from the department of Animal Pathology, Animal Production, Bromatology and Food Technology, three teachers from the Morphology department, two teachers from the Clinical Sciences department, one teacher from the Biochemistry, Molecular Biology, Physiology and Immunology department, and two student representatives. The teacher representatives are users of the communal laboratories of the Faculty. The function of this committee is to analyse the improvements which should be incorporated into the communal laboratories and to prepare the annual call for teaching re-equipment of the University. The committee meets at least once a year.

7) ***Compensation Board Committee***. This committee is chaired by the Dean, and is currently made up of eight teachers whose objective is to resolve requests for compensation evaluations according to the Rules for Compensation Evaluation of the Veterinary Faculty.

8) ***Special Prizes Committee***. This committee is chaired by the Dean, and is currently made up of six Ph-holding teachers. Its function is to decide the annual concession of a *Special Prize of Graduation* to the best academic performance and to choose a *Special Prize for Graduating Dissertations*. The committee meets at least once a year.

9) ***Quality Control Committee***. The Quality Control Committee of the Veterinary Faculty is a body which participates in the tasks of planning and carrying out the Veterinary Faculty Quality Guarantee System, as well as acting as an internal vehicle of communication on the policies, objectives, plans, programmes, responsibilities, and achievements of the system. This committee is proposed by the Dean and must be ratified by the Faculty Board. The commission is made up of:

- the Dean , or his delegate, who acts as president.
- the Quality Co-ordinator, who acts as secretary.
- the Vice-Dean of Teaching Affairs, responsible for degrees
- Four degree teachers, so as to guarantee the representation of the structure of degree awarding.
- A representative of the support staff, preferably with a background in Quality.
- A student representative, preferably with a background in Quality and a final year or post-graduate student.


Dean
Vice-Dean of Academic Affairs
Vice-Dean of Students and Exchange Programmes
Vice-Dean of Animal Collectives
Secretary
Faculty Board
CPIRA (Exchange Programmes)
COMMITTEES
Quality Control Committee
Special Prizes Committee
Teaching Affairs Committee
Animal Collectives Comittee
Compesation Boarad Committee
Communal Laboratories Committee
Library Committee
Extramural Practices Committee

B. The Departments

The Departments are the bodies in charge of co-ordinating the teaching of one or more areas of knowledge in accordance with the teaching programme of the University. In addition, they provide support for the teaching and research activities and also promote the initiatives of the teaching staff. At our Faculty, nine Departments currently have teaching assignments.

DEPARTMENT	Area of knowledge	Number of teaching staff
Animal Pathology, Animal Production, Bromatology and Food Technology	Medicine and Animal Surgery	18
	Parasitology	4
	Animal Health	7
	Animal Production	9
	Nutrition and Bromatology	5
	Food Technology	3
Morphology	Anatomy and Comparative Pathological Anatomy	12
Clinical Sciences	Toxicology	3
	Pharmacology	3
	Microbiology	3
Biochemistry and Molecular Biology, Physiology, Genetics and Immunology	Biochemistry and Molecular Biology	2
	Physiology	2
	Genetics	1
	Immunology	1
Biology	Zoology	4
	Ecology	2
	Botany	1
Physics	Physics	1
Mathematics	Statistics and Operations Research	2
Chemistry	Physic Chemistry	1
Modern Languages	English Philology	1

Each Department elaborates its own Regulations which must be compatible with the ULPGC Statutes. The governing bodies defined by ULPGC Statutes are: the Head of Department, the Department Secretary, the Head of Service, and the Department Council.

Head of Department: He/she is in charge of the management and operation of the Department, and also acts as the Department's representative for any events on a University level.

Department Secretary: He/she is responsible for the editing and signing of official reports and certificates.

Head of Service: Responsible for the functioning of the whole research and teaching infrastructure of the department, for its maintenance and upkeep, as well as the co-ordination of its use by different staff.

Department Council: Is made up of 68% teachers registered in the department, ensuring that at least 51% of the board is made up of Ph-holding teachers; 27% students and 5% support staff.

C. The Veterinary Teaching Hospital

Following the recommendations made in the EAEVE evaluation of our Faculty in 2000, from October 2001 (provisionally) and from March 2004 (permanently) a collaborative working agreement between ULPGC and the Canarian University Foundation of Las Palmas (FULP) was established to manage the Veterinary Teaching Hospital (VTH).

The VTH is now governed by the Management Committee, consisting of a president, vice-president and five voices. The president is the Rector of the ULPGC and the vice-president is the president of the Social Development Council (*Consejo Social*). The voices are chosen as follows: the Manager of the ULPGC, the Dean of the Veterinary Faculty, the President of FULP, the Manager of the FULP, and one member of the Social Development Council representing the social side. The Managing Director of the VTH acts as secretary of the committee, with a voice but no vote. The Management Committee meets at least once a semester.

The VTH has a Managing Director to manage the hospital activities, and the administrative and its economic tasks, as well as the staff needed for these tasks. The Managing Director is proposed by the Manager of the FULP and the nomination must be approved by the Management Committee.

The functions of the Managing Director are:

- To carry out the agreements made in the Management Committee sessions.
- To direct and co-ordinate the clinical activities and help services that the hospital carries out, as well as the staff needed for these tasks.
- To direct and co-ordinate the use of space and equipment, proposing and making purchases, improvements and maintenance to achieve the hospital's objectives.

- To direct the economic and administrative management of the hospital and to hold the direct management of contracted staff. University teachers who would like to participate in the clinical assistance services of the hospital must do so under the orders of the Managing Director.
- To plan the annual budget with estimates of income and expenditure of the hospital for each period, and the liquidation of accounts of income and expenditure corresponding to the previous financial period, which will be taken to the management board for approval.
- To plan the annual economic, management and clinical activity records.
- To facilitate the regulated teaching practices of the veterinary degree according to the teaching plans approved by University organs, as well as the use of the hospital for research work according to the rules established by the Management Committee.
- To develop relations between entities, companies and individuals interested in the hospital's activities, to promote and manage agreements, contracts or accords which are formalised.

The fulfilment of the functions of the hospital counts on:

- The Managing Director of the hospital is contracted by the FULP and is not a teacher of ULPGC in charge of activities under his control. Currently the Managing Director is a PhD veterinary surgeon specialising in endocrinology and who participates in the internal medical services in the area of his speciality.
- Teachers attached to the hospital: teachers who voluntarily have requested participation in the clinical assistance services under articles 83 and 68.1 of the University Organic Law. Currently there are nine staff attached to the hospital.
- Contracted veterinary surgeons, who full time or by piecework, offer their services. Currently there are four contracted veterinary surgeons (two for small animals, one for horses and the other for cattle).
- The hospital's own administration and service staff, who carry out tasks in support of the hospital work and/or management. It currently consists of two management administration staff, two maintenance staff, one qualified technical veterinary assistant, two animal handling assistants and one Clinical Pathology department laboratory assistant. Eight people in total.
- Internal veterinary surgeons: Veterinary graduates in their training period specialised with the ability to carry out simultaneously assistance activities. There are currently five internal vets. Four vets work with small animals for one year, and one vets who works with horses for three years.

According to the current agreement, the organisation of teaching practices for the Veterinary degree in the hospital is the responsibility of the Vice-Dean of Teaching Affairs. Rendering services for research in the hospital is under the control of the Vice-Rector of Research, Development and Innovation.

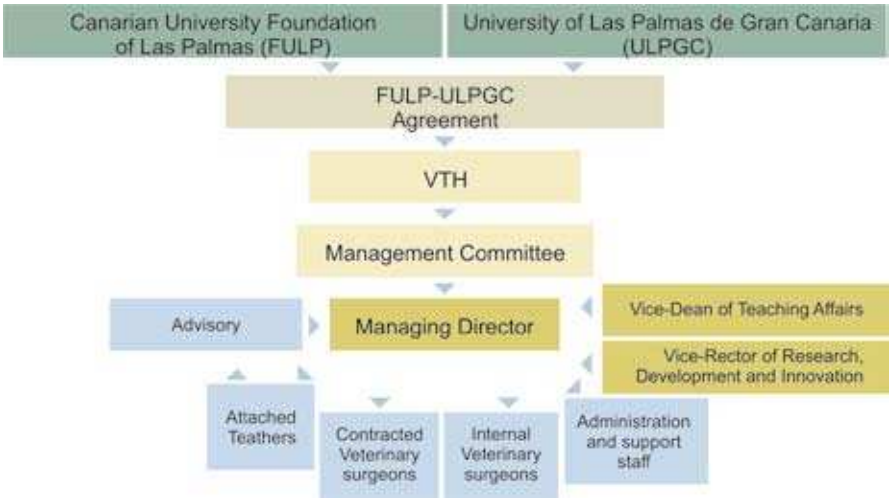
To organise the participation of the staff registered in the hospital in its assistance services, there is an Advisory Board, in a consultative role, there to help the Managing Director. The Advisory Board is chaired by the Managing Director and includes those responsible for specialist clinics which offer assistance services. When necessary the Vice-Dean of Teaching Affairs can attend, or the co-ordinator of Research Services, selected by the Vice-Rector of Research, Development and Innovation.

Recently, our hospital has joined the Spanish Association of University Veterinary Hospitals. All Spanish Veterinary Faculties are members of this association whose aims include:

1. The co-ordination of training in University Veterinary hospitals, at both undergraduate and postgraduate level, and continuous training.

2. The promotion, management and development of teaching and clinical assistance research as well as continuous training in the field of biomedical sciences.

3. The planning of criteria with regard to the co-ordination of students in the hospitals, the selections of interns and residents, training resources, study plans, interchange programmes and hospital structure.



4. Development of co-operation with public administration in the area of biomedical sciences in general and the veterinary profession in particular.

5. To develop relations and collaboration with other associations, in the area of biomedical sciences as well as health, and also other subjects which could be considered relevant, such as the EAEVE or any other organisation which helps the stated objectives.

Indicate the involvement of the veterinary profession and general public in the running of the Faculty.

The ULPGC's Social Development Council (*Consejo Social*) is the organ that serves as a liaison between the University and the community. This council provides a forum for the exchange of ideas between the University and the Canarian society. Its aim is to achieve better quality teaching, reinforce the research capacity and encourage the social, economic, and cultural progress of our society. It is responsibility of the Social Development Council to supervise the financial activities of the University and the performance of its services, and also to promote the collaboration of Society in the funding of the University and the relationships between it and its cultural, professional, economic, and social environment to ensure the quality of University activities. The Social Development Council is composed of 26 representatives: six belonging to the ULPGC and 20 representatives belonging to the different social interest groups (political groups, trade unions representatives, companies, etc). More details can be found in the ULPGC website: http://www.csocial.ulpgc.es

As for the Veterinary Faculty, in order to gain feed-back from the Veterinary profession and other fields, the Veterinary Faculty recently approved the constitution of an **External Advisory Council**, made up of five representatives of the Canarian Official Veterinary Colleges Board (Vets specialised in small animals, horses, cattle, pigs and poultry), one representative of Public Health, one representative of Agriculture and Animal Health, one representative of Education, one representative of the Canarian Industrial Association. Also included (although these positions are currently vacant) are one representative of the Environment, one representative of the Canarian Institute of Marine Sciences, and one representative of the Canarian Association of Aquaculture Businesses.

Currently, two of the Governing Board of the Official College of Veterinarians of Las Palmas (President and Secretary) have also a teaching position at the Veterinary Faculty, and act as link between both Institutions, in order to guarantee close collaboration and communication.

In addition, several of the Faculty's teaching staff members form part of the Governing Boards of various national Professional Associations. This fact not only helps to guarantee a close working relationship between associations and the Faculty, it also real experience that these professionals can share with them.

2.2. COMMENTS

Add any comments on the organisation and functioning of the Faculty that you feel useful for completing the description.

Brief explanation on the Educational System in Spain

The University Organic Law (LOU, 2001, amended in 2007) was directed toward a complete reform of the educational system in Spain. Associated reforms include: obligatory basic general education for 3 to 16 year-old students, elimination of rural/urban differences in educational opportunity, equal access to University education, University autonomy, and the creation of new Universities. Student financial aid is also to be better provided in a broad variety of scholarships, loans and other grants.

A recent law established two stages in higher education: an Undergraduate level of full time theory and practical classes to grant a Diploma (2 years in short-cycle degrees) or a Graduate Degree = Bachelor's Degree (4 or 5 years in long cycle-degrees, 5 years in the case of the Degree in Veterinary Medicine). These qualifications will enable them to work in their field of competency. There is also Postgraduate level in which graduate students may follow some type of specialisation (Master Degree) and/or preparation for research work leading to the defence of their Doctoral Dissertation (PhD Degree).

2.3. SUGGESTIONS

If you are not satisfied with the situation, please list your suggestions for change in order of importance and describe any factors which are limiting the further development of your Faculty.

The current organigram of the VTH makes it difficult for the Veterinary Faculty to play a pivotal role in taking strategic decisions which allow initiatives to be developed which affect teachers that are considered important from the centre. Only one of the seven votes on the Management Committee is for the Dean as head of the Faculty. It would be advisable to restructure the composition of the Management Committee to allow for a greater representation of the Veterinary Faculty. Although a representation group of teachers who work in the hospital exists, the Advisory Board functions only as an advisory body to the Managing Director of the hospital and its decisions and proposals are not linked.

There is no Academic Director of the hospital, who organises the teaching activities in the hospital. Currently the Vice-Dean of Teaching Affairs of the Faculty organises the practical clinics of the students, although the teaching requirements of an Academic Director of the VTH at both undergraduate and postgraduate level require greater dedication to this activity.

The departmental structure, especially in the case of the Animal Pathology, Animal Production, Bromatology and Food Technology department is inadequate given the wider heterogenity of that department. A departmental re-organisation would be advisable, carried out based on areas of similar knowledge. This recommendation was made at the previous visit, but has not yet been carried out.

The distribution of the departments in different areas, especially in basic subjects such as Physiology, Biochemistry, Toxicology, Pharmacology, Genetics and Immunology means that these teachers are not physically present in the Faculty for the most part of their time. Departments with a base in other centres should structure themselves in Departmental Sections which should have their offices and laboratories only in the Veterinary Faculty.

Although the Faculty has recently approved the creation of an External Advisory Council with the aim of gaining feed-back from Veterinary professionals and other entities, the lack of formal regulation from the University makes it difficult for it to function effectively.

CHAPTER III

Finances

3.1. FACTUAL INFORMATION

3.1.1. GENERAL INFORMATION

Indicate whether the Faculty's current financial model (system) meets the Faculty's mission.

In addition, please specify:

How the allocation of funding (including public funding) to the Faculty is determined, and by what body.

If the allocation of funds, or any significant proportion of it, is linked to a particular factor (e.g. student numbers, research output), please describe this.

How the basis for funding the Faculty compares with those teaching other courses (e.g. whether veterinary training receives a higher budget weighting compared to other disciplines).

How the allocation of funds within the Faculty is decided.

What are the mechanisms for funding major equipment and its replacement?

The mechanism(s) for funding capital expenditure (e.g. building work, major items of equipment) and how decisions are taken in this matter.

The mechanism(s) to provide the necessary support for building maintenance and how decisions are taken in this matter.

The recently approved ***Veterinary Faculty Strategic Plan 2008-2010*** established the following mission statement: *The Veterinary Faculty of ULPGC is a centre of further education, unique in the Canarian archipelago, committed to teaching quality and veterinary training. The Veterinary Faculty of ULPGC aims to offer adequate answers to the demands of Canarian society in questions that refer to animal medicine and health, public health, the food production sector, animal production in arid zones, Aquaculture and marine environment, in collaboration with other institutions, in a show of respect for nature and the animal world through the training of qualified professionals, research, and offering the most up to date services and quality.*

In general terms, the current financial model allows us, not without certain difficulties, to achieve our objectives which derive from the mission and vision statements of the Veterinary Faculty, being the ULPGC a public University.

The University Organic Law (LOU) states as a fundamental issue the economic and financial autonomy of the Universities. The law establishes the essential right of each University to be autonomous in the drawing up, approval, and management of its budgets and in the administration of its assets. The Veterinary Faculty, just like other ULPGC centres, has a peculiar system, since the most important areas of expenditure (namely: staff costs, services and work contracted out to external companies, maintenance services, waste collection and others) are managed and paid directly by the University's Central Services and the Faculty only receives these services and goods.

The budget of the ULPGC is annual, per calendar year (1 January to 31 December), not per academic year. Most of the ULPGC budget (78.46 % including fees from students) comes from the Government of the Canarian Autonomous Community. The model of distribution used by the Canarian Autonomous Community is based mainly on the number of students, teachers and centres of the two Canarian Universities. Initial approval of the budget is given by the ULPGC Government Board (*Consejo de Gobierno*), under the proposal of the Manager of the ULPGC. The budget is then submitted for final approval to the ULPGC's Social Development Council.

Since 2005 the ULPGC has created a new system of budget distribution among the different departments and centres based on two points: Structural payments and Objective payments.

In the case of the centres, the ***structural payment*** includes items such as: number of students matriculated, number of laboratories, number of credits given in laboratories, number of computer rooms, y number of credits given in computer rooms. The ***objective payment*** includes the following: percentage of graduates from students matriculated, percentage of exchange students from students matriculated, number of Graduating Thesis written, percentage of students in company or institutional practicals from the total number of students matriculated with more than 50% of credits passed, teaching evaluation of the centre (according to the evaluation questionnaires filled in by students), an average of subjects with active virtual support and the number of cultural activities organised by the centre.

In the case of the Departments, the ***structural payment*** includes the following items: number of full-time students on the previous year's course (awarding the first and second matriculations with a coefficient of 50%), the teaching of the department and the number of teaching laboratories. With regard to the ***objective payment*** there are three fundamental objectives:

1) To improve undergraduate teaching
2) To promote postgraduate teaching
3) To promote research

The items related to the first objective are: the proportion of teaching projects of subjects published by IT application, teaching evaluation of the department (according to the evaluation questionnaires filled in by students), teaching manuals and published learning materials, number of teachers who have taken part in the Teacher Training Plan, number of teachers on exchange programmes, and average number of subjects with active virtual support.

The items related to the second objective are: type of doctorate programme, number de students matriculated, number of PhD Thesis read, and number of mentions of quality.

The items related to the third objective are: number of doctoral theses passed by the department, number of lines of research recognised in the last six years, participation of integrated research departmental groups in the scientific production of the University, participation of integrated research departmental groups in the volume of competitive finance captured by the University.

In the distribution of the budget to different Centres and Departments, some items (such as money for laboratories and for credits taught in laboratories) favour the Veterinary Faculty and departments with teaching staff in our Faculty, when compared to centres which do not carry out laboratory practicals. The degree of experimentation of the qualification also needs to be taken into account. The degrees of experimentation correspond to those highlighted by the decree of public prices for official university teaching. However the small number of students in this degree (482 out of a total of 21,320 in the whole ULPGC) has negative consequences in the quantity that the Faculty receives by *structural payment*.

It is also necessary to emphasise that the budget money received for the VTH through the FULP accounts for an important difference with respect to other centres and allows for the development of clinical activities.

The distribution of the budget of each department and of the Veterinary Faculty are approved annually by the respective Department Boards and by the Faculty Board.

Regarding the mechanisms for funding major equipment and its replacement, there are two channels depending on the principal use of the equipment, teaching or research. The Vice-Rector of Academic Affairs holds an annual call of teaching re-equipment, for each centre and for the department, financing a high percentage of the overall cost, with the centre or department assuming the remaining percentage. This percentage of co-financing depends on the budget of each centre and/or department. In the case of the Veterinary Faculty the current percentage of co-financing actual is 20 %, the remaining 80 % assumed by the Vice-Rector of Academic Affairs. There is even the possibility of making joint requests by the Veterinary Faculty-Departments with the aim of obtaining more expensive equipment.

Through the research channel, there is also an annual meeting of the Canarian Government for scientific infrastructure projects which different research groups can apply for, as well as being able to join together to make joint requests for greater investment.

The ULPGC decides which infrastructure projects can be carried out and charged to the ULPGC's Annual Investment Plan, as well as repair, maintenance or safety tasks which have to be undertaken because they are strictly necessary or urgent. The Dean and his Executive Team submit the proposals to the ULPGC Management. Final decisions are taken after the evaluation of all requests put in by ULPGC centres depending on budget availability.

With regard to building maintenance, some services (cleaning, gardening, security, etc.) are contracted by ULPGC's Central Services to external companies, while ULPGC also distributes a budget to the administration of each centre to cover the internal costs of maintenance.

3.1.2. INFORMATION ON EXTRA INCOME

What percentage of income from the following sources does the veterinary teaching Faculty have to give to other bodies (university, etc)?
Clinical or diagnostic work
Research grants
Other (please explain)

A part of the revenue must be reinvested in the ULPGC. These returns can be classified as follows:

- Clinical Services: 3 % of income derived from the activity of the VTH is reinvested in the FULP.
- Diagnostic Services, External Services (Art 83 LOU): 10% of the total invoicing is reinvested in the ULPGC.
- Research grants/Projects: 21% of the cost of the project is reinvested in the ULPGC as indirect costs.
- Other Revenues (Continuing Education courses and diplomas): 20% of the registration fees is reinvested in the ULPGC.

Please indicate whether students:
Pay tuition/registration fees
How much these are
How they are decide
How the funds are distributed

All the students pay registration fees. For the academic year 2007/08, the student enrolment was 12.29 €/credit (an average of 950 €/student/year). For students who have to retake a subject, this fee increases every time they have to enrol in it again.

Fees for higher education are established by the Government of the Canarian Autonomous Community and kept between the limits proposed by the Spanish Ministry of Science and Innovation (formerly named Ministry of Education and Science). The ULPGC annually approves the budget including all the revenues (public funding from the government, registration fees, public or private revenues for research work, etc). Every Centre receives a proportional budget for ordinary expenditures and the rest of their expenditures (staff salaries, services and work contracted out to external companies, maintenance services, waste collection and others) which are, thus, paid directly by the ULPGC.

3.1.3. OVERVIEW INCOME (REVENUE) AND EXPENDITURE

Table 3.1. Income/Revenue

	State (government)		Income generated by the Faculty			
Year	To University administered outside the Faculty	Direct to the Faculty	Income from services (and agreements) provided	Research	Tuition / Registration fees	Total (euros)
2007	5,114,242.90	313,629.83	755,385.34	510,705.30	311,981.73	**7,005,945.0**
2006	4,659,091.20	260,516.59	612,613.17	446,759.21	324,575.61	**6,303,555.6**
2005	4,508,705.20	252,798.79	679,210.40	536,737.14	297,206.33	**6,274,697.7**

Table 3.2. Expenditure

Year	Pay			
	Salaries			
	Teaching staff	Support staff	Research staff	VTH
2007	3,116,947.40	1,062,108.50	354,200.54	309,335.45
2006	3,085,836.31	932,637.69	285,315.55	244,866.86
2005	3,056,729.19	914,298.97	267,526.99	183,252.93

Year	Non Pay (Operating costs, equipment and maintenance)				
	Teaching support	Research support	Clinical support *	Utilities and maintenance	Services
2007	313,629.83	495,608.00	314,329.89	271,652.01	563,979.10
2006	260,516.59	426,869,10	243,519.96	110,435.55	574,681.33
2005	252,798,79	501,798,56	213,783,80	86,938.34	487,375.85

*Operating costs and equipment included in the budget of the VTH

Year	Total expenditure (euros)
2007	6,801,790.50
2006	6,164,678.50
2005	5,964,502.90

3.2. COMMENTS

Teaching establishments never have enough finance. Please comment on any of the "Guidelines and requirements" that are particularly difficult to fulfil in the present financial situation. What is your number one priority for the use of any increased funding?

Comment on the degree of autonomy and flexibility available to the Faculty in financial matters.

Comment on the percentage of income from services that the Faculty is allowed to retain for its own use, and in particular on the extent to which loss of this income acts as a disincentive for the services concerned.

Please make any comments that you feel would help the experts concerning the Faculty's finances.

The main difficulties concerning the present financial situation are:

a) Staff

The Contract-Programme signed with the Canarian Government restricts the possibility of contracting new staff, which is especially necessary in some areas of currently under-covered knowledge. As well as this, given that we are going through a period of reform of degrees to converge towards the ESHE, a period in which new study programmes are going to be written, the ULPGC is currently unwilling to contract new staff.

The number of support staff to help teaching staff in the Veterinary Faculty is insufficient. Often the teachers themselves have to take charge of the preparation of the practicals.

b) Operating costs

The budget allocated to teaching needs to be increased. With the aim of providing quality practical classes to the students, on numerous occasions the teachers use money obtained for research purposes from various sources to cover the costs of their practical teaching.

c) Equipment

The level of autonomy of the Faculty and of the departments to invest in equipment, given the limited budget they control, is very restricted. Investment in medium and large equipment requires the participation of the ULPGC or searching for finance through various calls for scientific infrastructure and/or research projects.

d) Infrastructures (Buildings)

The level of autonomy of the Faculty to make investments in infrastructures (buildings, works and installations) is practically non-existent. There are two reasons for this: economic and functional. On the one hand, given the limited budget directly managed by the Faculty it is not possible to allocate money to works of a certain size. On the other hand, the rules of the functioning of the ULPGC force us to pass these needs through the Central Service of Works and Installations (*Servicio Central de Obras e Instalaciones*), which has a small number of staff and which much face the needs of every centre in the ULPGC, which leads to a delay of years in allocating funds to the needs requested by the Faculty.

The percentage of income for services which is allowed to be retained by the Faculty for its own use varies. In the case of the VTH income is used almost exclusively to cover the costs generated by the clinical practicals, economic incentives for teachers, etc. Only 3% is retained as management costs for the FULP.

However, in the case of the Faculty, only the agreements signed with public institutions or companies has allowed us to manage external resources. For example, in 2007 the Veterinary Faculty signed an agreement with the Education Department of the Canarian Government (*Viceconsejería de Educación del Gobierno de Canarias*) to allow primary schoolchildren to visit the installations of the farm and the Museum of Veterinary Anatomy, for which the Faculty received 6,000 € which was fully spent. Also since 2007 an agreement signed with the Official Veterinary College of Las Palmas

allows us to purchase annually books for our library to the value of 3,000 €, none of which is retained by the ULPGC. On the other hand, the Faculty receives no income derived from the hiring of its installations, money which goes directly to the Central Services of the ULPGC. Other income, such as that from research projects or Postgraduate Courses (Continuous Education), is managed by the project or course director so as to cover their own requirements and, hence, is not applied to the general requirements of the Faculty.

3.3. SUGGESTIONS

If you are not satisfied with the situation, please list any shortcomings and provide suggestions in order of importance and describe any factors which are limiting the further development of your Faculty.

Given that the ULPGC depends to a high percentage on public funds, and it is therefore subject to the Contract-Programme signed with the Canarian Government, the possibilities of relevant change are limited. Nevertheless, our principal suggestions are:

1. A model budget which within the ULPGC prioritises to a greater extent the experimental character of a Veterinary degree. In the current model, although taken into account, it is not sufficient to compensate for the limited incidental budget which within the structural payment has a reduced number of students of our Faculty.

2. A model budget which within the ULPGC takes into account the nature of the campus of our Faculty, VTH and IUSA. As opposed to other centres of the ULPGC, which have a single building, in our case it is necessary to maintain various buildings which specific characteristics (VTH, Farm, etc), as well as rectifying the problems derived from the isolation of our centre with respect to other centres of the ULPGC.

CHAPTER IV

Curriculum

4.1 FACTUAL INFORMATION

Indicate whether there is a defined national curriculum and (if applicable) how and by what body decisions are taken on this.

Describe the degree of freedom that the Faculty has to change the curriculum.

Outline how decisions on curriculum matters and course content are taken within the Faculty.

Outline how decisions are taken on the allocation of hours between the various subjects and on the balance between theoretical and practical teaching (Tables 4.1, 4.2 and 4.3).

Indicate the presence and disposition of an integrated curriculum. Describe the degree of integration present and amount of time devoted for EU- and non-EU-listed subjects (Table 4.4)

All the studies in Higher Education in Spain are regulated by the **Ministry of Science and Innovation** (formerly named Ministry of Education and Science). The centralised education administration, as mandated by the Spanish Parliament, has been adapted to a decentralised model to the Autonomous Communities that divides the educational competences; thus the Spanish Government reserves the functions of the legislation and co-ordination of the Spanish Education System while the Autonomous Communities, as the Canary Islands Government, have the political competences required to finance public Universities and also develop minor legislation. The latter make it possible for the University to have some say in developing curricula.

The current curriculum was defined and structured by the University of Las Palmas de Gran Canaria in accordance to: (1) the Royal Decree 1497/1987, dated 27 November dictated from the Spanish Ministry of Education and Science outlining the "Common General Guidelines of the Curricula Leading to Official University Degrees" and subsequent amendments (RD 1267/94, RD 2347/96, RD 614/97, RD 1561/97, RD 779/98 and RD 1651/98), (2) the Royal Decree 1394/1991, dated 30 August that state the "Specific Guidelines" referring specifically to the curriculum leading to the Official University Degree in Veterinary Science to its granting, and (3) the European Community Directive 78/1027/EEC, dated 18 December 1978 (which has since been replaced by Directive 2005/36/EU). The curriculum was verified and approved by the Ministry of Education and Science, dated 14 July 1999, subsequently approved by the ULPGC 20 December 1999, and published on the Spanish Official Bulletin on 20 January 2000. On October 2000 was introduced in the first year, and the curriculum was completely modified on October 2004.

The ***"Common General Curriculum Guidelines"*** (RD 1497/1987) state that all University degrees will be structured in two cycles. The first cycle includes basic learning and general training and the second cycle is devoted to a pre-specialisation and preparation for professional activity. The study load of the different subjects includes between 60 and 90 credits (1 credit equals 10 teaching hours) per academic year. The curriculum content in both the first and second cycles is arranged to distinguish between core subjects (which must be included in all curricula), obligatory (freely established by each university) and elective subjects (chosen by the student from those offered by the University for the flexible configuration of the curriculum). The study load in credits for the core subject group is a minimum of 30% and a maximum of 45% in the fist cycle and

a minimum 25% and maximum 40% in the second cycle. The percentage of elective credits must not be less than 10% of the total study load. The ***"Specific Guidelines to Veterinary Studies"*** state that the teaching load will be range between 20-30 hours per week, including practical sessions. A minimum of 300 credits must be obtained for the degree to be awarded.

The current legislation allows Universities a certain amount of flexibility to adapt the distribution of credits as needed. The total study load of credits may vary within the minimum and maximum permitted total in different Veterinary curricula. The number of credits assigned to core, obligatory and elective subjects may also vary although the legally established percentages for each of them must be maintained. In addition, the number of subjects used to teach the content of the core material may vary according to the needs of each University as well as the number of elective and optional subjects.

In order to change or amend the curriculum, the Faculty should start a process of revision of the curriculum. This process needs to be in according to the regulations previously mentioned.

As a result of the process of the construction and adaptation to the ESHE, initiated with the Bologna Declaration of 1999, the Spanish Ministry of Education and Science published the last ***University Organic Law (LOU)***, dated 21 December 2001. This Law has been recently modified, Modification Law of the University Organic Law (LMLOU), 4 April 2007. More recently, new regulations such as the RD 1393/2007, 29 October 2007 (defining the new regulation for the Official Spanish Higher Education Studies replacing the RD 1497/1987), the Order ECI/333/2008 (defining the general conditions of the Veterinary Degree), and the Canarian Autonomous Government Decree 168/2008, 22 July 2008 (regulating the adaptation of the new University Degrees of the Canarian Universities to the ESHE) have been published. Therefore, the current curriculum is nowadays under revision due to these new regulations.

Under the current Spanish laws, the process for the creation, modification and homologation of an official curricula and degrees has to be initiated by an intra-establishment commission that elaborates a proposal for a change. That proposal will be sent to the Faculty Board for approval. Once approved, the proposal must be sent to an independent Agency for Quality Assurance and Accreditation (ANECA). If the ANECA approves the change, the proposal is then submitted to the University Government Board. Once approved it is sent to the Autonomous Community Government to report on its financial implications and on the availability of means and appropriate resources to action it. Once approved on a University and Autonomous Community levels, the proposal is then submitted to the Co-ordination Council of Spanish Universities four further

examinations. If this Co-ordination Council approves the proposal a positive memorandum is sent to the Spanish Ministry of Science and Innovation who has the final decision.

Although the curriculum is practically immobile, the Faculty has certain degree of freedom to change the syllabus of the subjects in order to introduce a change for co-ordinate and/or integrate the contents.

The syllabuses of the subjects are structured in the same way as listed in the Directive 2005/36/UE. Therefore, there is little integration of the subjects; neither between species (i.e. equine, bovine or small animals) nor specialities (i.e. cardiology, dermatology, orthopaedics or neurology). However, two obligatory subjects are some integrated: (1) *Fishes and Marine Mammals Morphophysiology* integrates anatomy, histology and physiology; and (2) *Fish Pathology* integrates Infectious and Parasitic diseases and Pathology.

4.1.1 POWER OF SUBJECTS AND TYPES OF TRAINING

4.1.1.1 POWER OF SUBJECT

- "core" subjects taken by every student;
- "electives" which each student must select from a list of permissible subjects;
- obligatory extramural work.

As shown in tables, the curriculum is made up of a total of 415 credits (1 credit = 10 hours, then 4150 hours). 80% (333 credits = 3300 hours) corresponds to core and mandatory subjects (mandatory for all students), 10% (40.5 credits = 405 hours) corresponds to electives (as designated by each Faculty) and 10% (41.5 credits = 415 hours) in optional subjects (students choose them from all the ones offered by ULPGC), which allows for a more flexible curriculum. The 333 core subject's credits include 15 credits of obligatory extramural work (*Pre-professional Training I* and *Pre-professional Training II*).

4.1.2- UNDERGRADUATE CURRICULUM FOLLOWED BY ALL STUDENTS

4.1.2.1 CURRICULUM HOURS

This section makes a distinction between curriculum hours to be taken by every student and those offered as electives or within a given track. Specific information is also requested on subjects other than those specified in table 4.2

Table 4.1: General table of curriculum hours taken by all students.

Year	Hours of training							
	Theoretical training		Supervised practical training				Other (G)	**Total**
	Lectures (A)	Seminars (B)	Self--directed learning (C)	Laboratory and desk based work (D)	Non-clinical animal work (E)	Clinical work (F)		
First	230	45.5	32	140.5	62.5	0	129.5	**640**
Second	364	28.5	8	173	37	0	59.5	**670**
Third	318	32	0	161	27	62	5	**605**
Fourth	294	90.5	5	113	20.5	193.5	48.5	**765**
Fifth	357	8	5	44	63	168	5	**650**
Total	**1563** (46.9%)	**204.5** (6.1%)	**50** (1.5%)	**631.5** (19.0%)	**210** (6.3%)	**423.5** (12.7%)	**247.5** (7.4%)	**3330** (100%)
		1817.5 (54.6%)			**1265** (38.0%)			

B At ULPGC, seminars include a kind of lectures with more active participation of students about a relevant content not included in the traditional syllabus of the subject.

C Self –direct Learning includes Tutorials or Supervised Group Work (preparation of works with the teacher)

G Others hours of training included: examinations, external visits to natural environments or farms (non clinic), some estimating of e-learning without the presence of the teacher, non-supervised self-learning, etc.

Table 4.1a Core subjects within the curriculum by year and taken by every student.

Year	Code	Subject (Translation into English could not fit the official names in Spanish)	Semester	Total hours	Theoretical hours	Practical hours
1	12846	Mathematics (Biomathematics)	1	**50**	30	20
	12847	Physics	1	**50**	30	20
	12848	Animal and Plant Biology	1	**60**	30	30
	12849	Chemistry	1	**50**	30	20
	12850	Anatomy I	1 and 2	**120**	60	60
	12851	Cytology	2	**45**	15	30
	12852	Biochemistry	1 and 2	**100**	60	40
	12853	Agronomy and Rural Economy	2	**70**	45	25
	12854	Animal Behaviour, Animal Protection & Ethnology	2	**50**	30	20
	12855	Immunology	2	**45**	30	15
2	12856	Anatomy II	1	**70**	30	40
	12857	Histology	1	**50**	30	20
	12858	Animal Physiology	1 and 2	**140**	90	50
	12859	Microbiology	1 and 2	**90**	60	30
	12860	Parasitology	1	**60**	30	30
	12861	Genetics	2	**75**	45	30
	12862	Epidemiology	1	**45**	30	15
	12871	Fundamentals and Methods for Research	1	**50**	30	20
	12872	Fish and Marine Mammals Morphology and Physiology	2	**45**	30	15
	12882	Aquaculture	2	**45**	30	15
3	12863	Animal Nutrition	1 and 2	**100**	60	40
	12864	Food Science & Technology	1 and 2	**130**	75	55
	12865	Propaedeutics	1	**70**	15	55
	12866	Physiopathology	1	**45**	30	15
	12867	General Pathological Anatomy	2	**60**	30	30
	12868	Pharmacology	2	**65**	45	20
	12869	Animal Husbandry	2	**90**	60	30
	12870	Radiology	2	**45**	15	30
4	12873	Special Pathological Anatomy	1	**90**	30	60
	12874	Pharmacy and Therapeutics	1	**45**	30	15
	12875	Infectious Diseases	1 and 2	**130**	75	55
	12876	Surgery I	1	**70**	45	25
	12877	Surgery II	2	**70**	30	40
	12878	Parasitic Diseases	1	**100**	45	55
	12789	Toxicology	1	**70**	45	25
	12880	Internal Medicine I	2	**70**	45	25
	12881	Food hygiene	2	**45**	30	15
	13239	Pre-professional Training I	1 and 2	**75**	0	75

Year	Code	Subject (Translation into English could not fit the official names in Spanish)	Semester	Total hours	Theoretical hours	Practical hours
5	12883	Fish Diseases	1	**45**	30	15
	12884	Animal Production and Veterinary Hygiene	1 and 2	**120**	90	30
	12885	Obstetrics and Reproduction	1 and 2	**140**	75	65
	12886	Preventive Veterinary Medicine and Sanitary Policy	2	**60**	45	15
	12887	Internal Medicine II	1	**70**	45	25
	12888	Inspection and Control of Animal Foodstuffs	1 and 2	**95**	60	35
	12889	Professional Ethics, Forensic Medicine and Veterinary Legislation	1	**45**	30	15
	13242	Pre-professional Training II	1 and 2	**75**	0	75
		TOTAL		**3330**	**1845** (55.4%)	**1485** (44.6%)

Table 4.2: Curriculum hours in EU-listed subjects taken by each student

Subject	Theoretical training			Supervised practical training			Other	**Total**
	Lectures A	Seminars B	Self-directed learning C	Laboratory and desk based work D	Non-clinical animal work E	Clinical training F	G	
1. Basic subjects								
a) Physics	16	6	3	12	0	0	13	**50**
b) Chemistry[1]	21	3.5	7	24	0	0	19.5	**75**
c) Animal biology	13	4	6	7.5	0	0	0	**30.5**
d) Plant biology	12	4	6	7.5	0	0	0	**29.5**
e) Biomathematics[2]	28	2	6	16	0	0	23	**75**
1- Total number of hours	***90***	***19.5***	***28***	***67***	***0***	***0***	***55.5***	***260***
2. Basic sciences								
a) Anatomy (including histology and embryology)[3]	111	14	7	57	72	0	69	**330**
b) Physiology	90	17	0	33	0	0	0	**140**
c) Biochemistry, cellular and molecular biology	42.5	11.5	3	26	0	0	17	**100**

d)	Genetics (including molecular genetics)	45	0	0	30	0	0	0	**75**
e)	Pharmaco-logy and pharmacy[4]	55	9	0	11	0	0	0	**75**
f)	Toxicology (including environmental pollution)	45	2	0	23	0	0	0	**70**
g)	Microbiology (including virology, bacteriology and mycology)	60	0	0	30	0	0	0	**90**
h)	Immunology	30	0	0	11	0	0	4	**45**
i)	Epidemiology (including scientific and technical information and documenta-tion methods)	30	0	0	15	0	0	0	**45**
j)	Professional ethics[5]	8	0	0	0	0	0	0	**8**
2- Total number of hours		***516.5***	***53.5***	***10***	***236***	***72***	***0***	***90***	***978***

3. Clinical Sciences

a)	Obstetrics[6]	18	0	2	0	0	15	0	**35**
b)	Pathology including pathological anatomy[7]	78	25	0	42.5	47.5	0	2	**195**
c)	Parasitology[8]	36	14	7	48	0	0	61	**166**
d)	Clinical medicine[9]	45	37.5	0	0	0	32	7.5	**122**
e)	Clinical lectures on various domestic animal, poultry and other animal species[10]	93	12	0	32.5	0	8	0	**145.5**
e)	Surgery (including anaesthetics)[11]	75	0	0	0	0	58	0	**133**
f)	Preventive Medicine[12]	17	0	0	6	0	0	0	**23**
g)	Diagnostic imaging (including radiology)	15	0	0	8	0	22	0	**45**
h)	Field veterinary medicine (ambulatory clinics)[13]	0	0	0	0	0	55.5	0	**55.5**

Subject	Theoretical training			Supervised practical training			Other	Total
	Lectures A	Seminars B	Self-directed learning C	Laboratory and desk based work D	Non-clinical animal work E	Clinical training F	G	
h) Reproduction and reproductive disorders[14]	47	0	3	0	0	50	5	**105**
i) Veterinary state medicine and public health[15]	28	0	0	9	0	0	0	**37**
j) Veterinary legislation and forensic medicine[16]	14	8	0	15	0	0	0	**37**
k) Therapeutics[17]	20	15	0	0	0	0	0	**35**
l) Propaedeutics (including laboratory diagnostic methods)[18]	15	12	0	0	0	33	3	**63**
3- *Total number of hours*	***501***	***123.5***	***12***	***161***	***47.5***	***273.5***	***78.5***	***1197***
4 Animal Production								
a) Animal production[19]	100	0	0	4	41	0	0	**145**
b) Animal nutrition	60	0	0	40	0	0	0	**100**
c) Agronomy	18	5	0	10	0	0	15	**48**
d) Rural economics	12	2	0	8	0	0	0	**22**
e) Animal husbandry	60	0	0	30	0	0	0	**90**
f) Veterinary hygiene[20]	20	0	0	0	0	0	0	**20**
g) Animal ethnology and protection	20.5	0	0	11.5	9.5	0	8.5	**50**
4- Total number of hours	***290.5***	***7***	***0***	***103.5***	***50.5***	***0***	***23.5***	***475***

	Subject	Theoretical training			Supervised practical training			Other	Total
		Lectures A	Seminars B	Self-directed learning C	Laboratory and desk based work D	Non-clinical animal work E	Clinical training F	G	
5	**Food Hygiene / Public Health**								
	a) *Inspection and control of animal foodstuffs or foodstuffs of animal origin and the respective foodstuff production unit*[21]	60	0	0	10	0	0	0	**70**
	b) *Food hygiene and technology*[22]	30	0	0	12	0	0	0	**42**
	c) *Food science including legislation*[23]	75	1	0	42	0	0	0	**118**
	d) *Practical work (including practical work in places where slaughtering and processing of foodstuffs takes place)*[24]	0	0	0	0	40	0	0	**40**
	5- Total number of hours	***165***	***1***	***0***	***64***	***40***	***0***	***0***	***270***
6	**Professional knowledge** [25]								
	a) *Practice management*[26]	0	0	0	0	0	150	0	**150**
	b) *Professional ethics*[27]	0	0	0	0	0	0	0	**0**
	c) *Veterinary certification and report writing28*	0	0	0	0	0	0	0	**0**
	d) *Veterinary legislation*[29]	0	0	0	0	0	0	0	**0**
	e) *Career planning and opportunities*[30]	0	0	0	0	0	0	0	**0**
	6- Total number of hours	***0***	***0***	***0***	***0***	***0***	***150***	***0***	***150***

In order to complete the above table 4.2, the hours of the different subjects from ULPGC curriculum have been adapted to the UE listed subjects. Specifications are:

1. Hours of Chemistry form the subjects Fundamentals and Methods for Research are included (A=10, B=1.5, C= 3, D=4, G= 6.5, Total=25)
2. Hours of Mathematics form the subjects Fundamentals and Methods for Research are included (A=10, B=2, C= 3, D=4, G= 6, Total=25)
3. Hours of Anatomy I (A= 30, B=10, C=2, D=4, E=46, G=28, Total=120), Anatomy II (A=24, E=26, G=20, Total=70), Cytology (A=7, B=4, C=2, D=18 G=14, Total=45) and Histology (A=20, C=3, D=20, G=7, Total=50). Also Hours form Fish and Marine Mammals Morphology and Physiology are included (A=30, D=15, Total = 45).
4. Hours of Pharmacology (A=45, B=9, D=11, Total=65) and Pharmacy (A=10) from the subject Pharmacy and Therapeutics are included.
5. Only hours of Professional Ethics from the subject Professional Ethics, Forensic Medicine and Veterinary Legislation are included.
6. Only hours of Obstetric from the subject Obstetrics and Reproduction subject are included.
7. Hours from Physiopathology (A=18, B=10, E=15, G=2 Total= 45) General Pathological Anatomy (A=30, D=15, E=15, Total=60) and Special Pathological Anatomy (A=30, B=15, D=27.5, E=17.5, Total =90) are included.
8. Hours from Parasitology (A=15, B=5, C= 2, D=18, G=20, Total=60), Parasitic diseases (A=9, B=9, C=5, D=24, G=41, Total=88), and Fish Pathology (Parasitic Diseases) (A=12, D=6, Total=18), are included, except for ambulatory clinics of Parasitic Diseases (F=12).
9. Hours from Internal Medicine I (B=37.5, G=7.5, F=18) and Internal Medicine II (A=45, F=14) are included, except for ambulatory clinics on Equine (11 hours) and Bovine (7 hours).
10. Includes the hours of Infectious Diseases (A=75, B=12, D=26.5, F=8, Total=113.5) and Fish Pathology (Infectious Diseases), (A=18, D=6, Total=24) except for ambulatory clinics of Ruminants (2.5 hours), Porcine (2 hours), Poultry (4 hours), and Fishes (3 hours).
11. All hours from Surgery I and II are included, except of 7 hours from Surgery II of ambulatory clinics(3.5 Equine and 3.5 Bovine)
12. Only hours of Preventive Veterinary Medicine from the subject Preventive Veterinary Medicine and Sanitary Policy are included.
13. Includes the ambulatory clinics (E) of Parasitic Diseases (12 hours: 4 ruminants, 4 porcine and 4 Rabbits or Bees), Internal Medicine I (7 hours: 3.5 Equine and 3.5 Bovine), Internal Medicine II (11 hours: 3.5 Bovine, 7.5 Equine), Propaedeutics (7 hours: 3.5 Equine and 3.5 Bovine) and Surgery II (7 hours: 3.5 Equine and 3.5 Bovine), Infectious Diseases (8.5 hours: Ruminants 2.5; Porcine 2, Poultry 4 and Fish Pathology (Infectious Diseases): Fishes (3 hours).
14. Only hours of Reproduction Physiology, Reproduction Technology and Reproductive Disorders from the subject Obstetrics and Reproduction are included.
15. Only hours of Sanitary Policy from the subject Preventive Veterinary Medicine and Sanitary Policy are included.
16. Only hours of Forensic Medicine and Veterinary Legislation from the subject Professional Ethics, Forensic Medicine and Veterinary Legislation are included.
17. Only hours of Therapeutics (A=20, B= 15) from the Subjects Pharmacy and Therapeutics are included. However, therapies of the diseases are studied in the different subjects (internal medicine, infectious and parasitic diseases, reproductive disorders, etc.)
18. 7 hours of Propedeutics are included in ambulatory clinics.
19. Only hours of Animal Production from the subject Animal Production and Veterinary Hygiene are included. Also hours from Aquaculture are included (A=30, D=4, E=11).
20. Only hours from Veterinary Hygiene from the subject Animal Production and Veterinary Hygiene are included.
21. Only Hours from Inspection and Control of Animal Foodstuffs are included, except for slaughtering (E=15) and processing of foodstuffs (E=10).
22. Only Hours from Food Hygiene are included, except for processing of foodstuffs (E=3).
23. Only Hours from Food & Science Technology are included, except for processing of foodstuffs (E=12).
24. Hours of slaughtering and processing of foodstuffs from the subjects Food Hygiene (3 hours), Inspection and Control of Animal Foodstuffs (15 + 10 = 25 hours) and Food & Science Technology (12 hours) are included.
25. This new section is not included in the curriculum as specific subjects, but most of the syllabuses are included in the different subjects.
26. Hours form the subjects Pre-professional Training I and II.
27. Repeated Section: Hours included in Basic Sciences (paragraph “j”)
28. Hours included in different subjects.
29. Hours included in different subjects.
30. Not included in the curriculum.

Hours from individual study and/or working in groups without a teacher are not included due to its difficulty for calculations; however the currently pilot project for ECTS credits experience is determining or estimating the total dedication of the student for every activity in each subject.

Mainly to facilitate the documents for readings, most of the subjects are using e-learning as a support for the classical theoretical and practical teaching methods. However, other subjects are using several kinds of e-learning activities in order to achieve the objectives of learning. Therefore, in a few subjects the estimation of dedication of students to examinations, e-learning and self direct learning is included in section C or G.

Table 4.3: Curriculum hours in EU-listed subjects offered and to be taken as electives

	Subject	Theoretical training			Supervised practical training			Other	**Total**
		Lectures A	Seminars B	Self-directed learning C	Laboratory and desk based work D	Non-clinical animal work E	Clinical training F	G	
Code	**Basic subjects**								
12923	Scientific Language (English)	14	0	0	21	0	0	10	**45**
12921	Atmosphere, Weather & Environment	30	0	0	15	0	0	0	**45**
	Basic sciences								
12917	Techniques for Cultures of Marine Organisms. Nutrition of Marine Animals.	45	0	0	43	0	0	2	**90**
12900	Marine Mammals Biology and Pathology	15	0	0	6	21	0	3	**45**
12918	Fishing Biology	15	0	0	30	0	0	0	**45**
12890	Applied Anatomy using Imaging Techniques	12	0	4	12	0	0	17	**45**
	Clinical sciences								

12898	Exotic and Wild Animals Medicine. Paediatrics and Gerontology	16	8	4	16	6	35	5	**90**
12908	New Technologies for Animal Reproduction	15	0	0	0	15	15	0	**45**
12897	Goat Medicine	11	4	0	0	0	16	14	**45**
12902	Exotic Infectious Diseases and Compared Tropical Pathology	30	0	0	15	0	0	0	**45**
12891	Veterinary Pathology Diagnosis and Veterinary Oncology	30	0	0	60	0	0	0	**90**
	Animal production								
12904	Goat Production and Nutrition in Arid Areas	45	0	0	39	0	0	6	**90**
12905	Canary Islands Agricultural Perspectives and Livestock	45	0	0	45	0	0	0	**90**
12907	Sustainable Agriculture and Livestock. Environmental Veterinary	60	0	0	28	0	0	32	**90**
	Food hygiene/ Public health								
12914	Vegetables Food Technology	45	0	0	45	0	0	0	**90**
12920	Laboratory Techniques in Microbiology	12	2	0	14	0	0	17	**45**
12910	Food Microbiology and Milk Science.	23	6	6	24	0	0	31	**90**
	TOTAL	**463**	**20**	**14**	**413**	**42**	**66**	**137**	**1125**

The inherent nature of an elective is, that students make a distinction and select. However, the total number of hours to be taken by each student out of the various subject groups should be stated.

Where a Faculty runs a "Tracking system" this should be indicated when completing Table 4.3. Separate tables should be provided for each track, e.g. Table 4.3a: Curriculum hours in EU-listed subjects to be taken in the "equine medicine track".

In order to complete the total credits of the curriculum, each student have to take a total of 40.5 credits (405 hours) from the elective subjects.

There is not a "Tracking System" defined in the curriculum. However, the elective subjects are classified as in tracking, but the total credits for each tracks do not sum 40.5 credits. Although there are no specialities defined in the curriculum, students have usually a clear orientation towards one of the main Veterinary Graduate action fields, namely: "*Veterinary Medicine*", "*Animal Production*", "*Food Hygiene and Technology*" and "*Marine Biology and Resources*". Elective Basic Subjects are classified as "*Others*". Students can freely choose among the elective subjects offered. All the hours must be elected freely by students during the first or second cycle, however is recommended that student take the subjects in years 3, 4 and 5.

Tab. 4.4 requests information concerning curriculum hours in subjects not listed in Table 4.2 to be taken by every student. If offered as electives or within a special track, please develop separate tables (e.g. 4.4a, b…).

In order to complete the curriculum a total of 41.5 credits (415 hours) from optional subjects or free configuration must be taken by every student.

Free configuration hours are of a varied nature and their aim is to complete the student training in those areas of his/her interest. These subjects are offered by University Faculties or Schools and Departments. Also many activities, related to the Veterinary Profession, like Veterinary Congress or Continuing Education Courses planned by the Faculty or by the Professional Colleges or Non-Profit Organisations could be validated as free configuration hours by the Dean.

Table 4.4 shows the different subjects offered in 2007-2008 by the Veterinary Faculty or its Departments.

Table 4.4: Curriculum hours in subjects not listed in Table 4.2 to be taken by each student, including Diploma work (final graduation thesis, or final graduation work).

Code	Subject	Theoretical training			Supervised practical training			Other	Total
		Lectures A	Seminars B	Self directed learning C	Laboratory and desk based work D	Non-clinical animal work E	Clinical work F	G	
16308	Molecular bases of the Cancer	-	-	25	-	5	-	-	30
16675	Industrial Poultry	20	-	-	-	-	40	-	60
16899	Intensive Production of Goat Kids	-	-	30	-	-	-	-	30
13210	Food and Culture	15	-	15	-	-	-	-	30
17000	Agricultural Legislation	15	-	45	-	-	-	-	60
17001	Livestock Farming Legislation	15	-	45	-	-	-	-	60
-	Food Radioactivity Control	45	-	-	-	-	-	-	45

4.1.3 FURTHER INFORMATION ON THE CURRICULUM

Provide the visiting team with highlights and any unusual or innovative aspects of the teaching programme, e.g. tracking and orientation programmes

From the academic year 2006-2007 the Veterinary Faculty is under a Pilot Project for adaptation to European Space for Higher Education initiated with the Bologna Declaration of 1999.

The objectives of this Teaching Innovation Project are:

- Facilitate experience in the ECTS use before the complete introduction of the new curricula.
- Motivate the introduction of new teaching methods centred in the students learning.
- Determine the work load of the teachers.
- Determine the real work load of the students, mainly in non-supervised work.
- Determine the needs of co-ordination.
- Determine the costs for the new curriculum: human resources and facilities.
- Motivate the developing of Teaching Guides.
- Carry on the Training Plan for the Teachers orientated to new teaching methods.

Actually the pilot project is developing in the third year. Some subjects of the fourth and fifth year are also involved. Therefore, you should find differences between the information of the subjects defined the official curriculum and the real information provided within the tables (information data from the Academic Year 2007-2008).

State the parts of the programme that must be attended as obligatory by the students and how the attendance is verified

Attendance to Theoretical Hours is neither controlled nor verified in most of the subjects.

Attendance to Practical Hours is obligatory in all the subjects; therefore the attendance to this part of the programme is verified.

In order to co-ordinate the election of groups for attendance to the different practices of the subjects a specific software has been developed by the Faculty. Through the Web site of the Faculty (http://www.fv.ulpgc.es), students must fill their academic agenda using this software named "Gestor Académico" ("*Academic Management"*). ***Control of Attendance Record*** of the students is offered automatically by the software and has to be impressed by the teachers. Therefore, all the information provided in this Self Evaluation Report is extracted from the "*Academic Managment*" and could be verified at any moment.

After every semester teachers have to hand over the Dean-Office the Control of Attendance Records completely fulfilled. From this information the Dean-Office produces an *Annual Teaching Report* that is presented and approved by the Faculty Board, and is sent to the Rector and Heads of the different Departments.

Please provide specific information on the practical clinical training; If clinical training is be provided through obligatory clinical rotations in different areas, please give an outline description of how this is structured, in terms of:

- are such rotations a structured part of the training given to all undergraduate students?
- the total number of days or weeks of such rotations;
- the year(s) in which they occur;
- the different areas covered and the time spent in each area;
- whether attendance is full-time, for part of the day, and/or other (e.g. based on case needs);
- the activities and case responsibilities that students are expected to undertake.
- the group sizes in the clinical rotations

The Clinical Training provided in the type of training defined as "**Clinical Work**", strictly hands-on by the students is offered in the Faculty classified as follows:

- **Obligatory Clinical Practices:** include work on normal animal, on organs or cadavers or clinical subjects (i.e. clinical workshops, practising suture, anaesthesia machine management, surgical approach or laboratory work). Obligatory Clinical Practices are shown on Table 4.1.3.1
- **Obligatory Clinical Rotations:** include work on individual patients at the VTH where student deals with real clinical cases as in normal practice. Obligatory Clinical Rotations are shown on Table 4.1.3.2.
- **Ambulatory Clinics** include only extramural work on individual patients and herds. Ambulatory Clinics are shown on Table 4.1.3.3.

Table 4.1.3.1 Obligatory Clinical Practices.

Subject	Year	Semester	Content	Nº of students /Group	Hours per group
Physiopathology	3rd	1	Blood collection in Dogs, Cows and Goats. Laboratory Work: Blood Analysis (Complete Blood Work, Biochemistry Profile, Electrolytes) and Urine Analysis	5	15
Radiology	3rd	2	Basic principles and techniques for producing high quality radiographs and radiology protection Fundamentals of radiographs interpretation	6	30
Propaedeutics	3rd	1	Clinical History, Anamnesis and Clinical Software (2 hours) Physical Examination of Small Animals (2 hours), Bovine (3 hours) and Equine (3 hours). Clinical Pathology (9 hours)	6	19
Internal Medicine I	4th	2	Cardiology Workshop (4 hours)	8	4
Surgery I	4th	1	Sutures (3,5 hours) Anaesthesia (3,5 hours) Orthopaedics Workshop (4 hours)	5	11
Surgery II	4th	2	Soft Tissue Surgery Workshops (15,5 hours)	5	15.5
Reproduction	5th	1 and 2	Small Ruminants Reproduction: - Semen Technology (10 hours) - Heat Control/Direct Mating (2 hours) - Hormonal Control of oestrous cycle (4 hours) - Pregnancy Diagnosis 35 Days (ultrasonography) (2 hours - Pregnancy Diagnosis 42 Days (ultrasonography) (1 hour) - Bovine Reproduction (10,5 hours) - Porcine Reproduction (10,5 hours) Small Animals Reproduction: - Semen collection, semen evaluation, artificial insemination (2 hours) - Pregnancy diagnosis (ultrasonography) (2 hours - Obstetrics (Caesarean Section, etc.) (4 hours) - Clinical training (8 hours) - Vaginal cytology in bitches (2 hours) - Rabbits Reproduction: (7 hours)	5	65
TOTAL					**159.5**

Specifically at Reproduction students must be able to:

a. Small Ruminants Reproduction: (10 hours)
- Collect goat sperm by artificial vagina
- Immediate treatment of semen after its collection
- Learn the techniques of contrasting semen: Quality of ejaculate.
- Take part in the seminal dilution and cryopreservation procedures.

b. Bovine Reproduction (10.5 hours)
- Should be able, by rectal palpation, to identify clearly the anatomic structures of the reproductive apparatus of a cow, in both cyclic animals and at various stages of gestation.
- To know the material of artificial insemination, its handling, and to be able to carry out a insemination protocol on different cows.
- Evaluate the reproductive potential of a bull, but exploration, by ecographic evaluation, and evaluation of sperm quality.

c. Porcine Reproduction (10.5 hours)
- Reproductive Evaluation of Porcine livestock
- Collection and Evaluation of porcine semen
- Ecographic examination of testicles
- To know the main pathologies which affect the reproduction of male pig.
- Identify the signs of a sow on heat, the optimum moment for mounting/insemination as well as carrying out a diagnosis of gestation by ecograph/palpation.

d. Vaginal cytology in bitches (2 hours)
- To carry out and interpret a vaginal cytology in a bitch, defining its physiological state.
- Interpret cells indicative of vaginitis.

Table 4.1.3.2. Obligatory Clinical Rotations.

Subject	Year	Semester	Clinical Service	Nº of students /Group	Hours
Propaedeutics	3rd	1	Small Animal Internal Medicine (3.5 hours)	4	14
			Small Animal Surgery (3.5 hours)	4	
			Dermatology (3.5 hours)	4	
			Ophthalmology (3.5 hours)	4	
Internal Medicine I	4th	2	Small Animal Internal Medicine (7 hours)	4	14
			Dermatology (3.5 hours)	4	
			Ophthalmology (3.5 hours)	4	
Surgery I	4th	1	Small Animal Orthopaedics (11 hours)	5	14.5
			Small Animal Surgery (3.5 hours)	5	
Surgery II	4th	2	Small Animal Surgery	3-4	7
Infectious Diseases	4th	1 and 2	Vaccine Protocol Exotic Medicine	**5**	**4**
Internal Medicine II	5th	1	Small Animal Internal Medicine (7 hours)	4	14
			Dermatology (3.5 hours)	4	
			Ophthalmology (3.5 hours)	4	
TOTAL					**67.5**

The clinical activity of the student is always supervised by a veterinary teacher. Also, at the VTH, the veterinary staff (interns and clinician) participates in the teaching activities but under the supervision and responsibility of an academic staff.

At the VTH, the **general clinical hands-on activity** of the student in the clinical services includes:

- At Consultations:
  - Carry out patient's an anamnesis.
  - Complete physical examinations of patients.
  - Present the case to the clinician.
  - Elaborate the list of problems, differential diagnosis and working plan
  - After getting a diagnosis (if possible) they design and apply the therapeutic plan
- At surgery:
  - Patients examinations
  - Prepare patients for surgery (clipping, scrubbing, medication …)
  - Anaesthesia Management: induction, intubation, maintenance and recovery, monitoring by filling the anaesthetic control sheets
  - Attend surgical procedures with one veterinary (staff, intern or clinician)
  - Perform easier surgeries by themselves (ovariohysterectomy and orchiectomy)
  - Post-op care of patients
- At hospitalisation:
  - Progress and Revision of hospitalised patients
  - Give treatments: calculation of doses, injections …
  - Patients cares (wound cleaning, dressing, sutures, …)
- In general:
  - Blood collection
  - Place IV catheter,
  - Prepare and calculate the Fluid Therapy
  - Perform radiographic studies, discuss and interpreting results with the clinician
  - Perform an electrocardiogram and write the ECG record
  - Write the Medical Records

Small Animal Reproduction (16 hours)

1. Semen collection, semen evaluation, artificial insemination:2 hours

- Become familiar with the reproductive physiology of the dog:
- Be able to collect semen by manual stimulation
- Systematic evaluation of the semen (fertile, subfertile)
- Protocols of insemination (vaginal, intrauterine)

2. Pregnancy diagnosis (ultrasonography): 2 hours
- Diagnose gestation in bitches by ecograph
- Determine fetal vitality
- Determine the number of embryos-fetuses
- Identify fetal structure
- Determine fetal pathologies
- Evaluate signs of normal gestation.
- Evaluate signs of fetal distress.

3. Obstetrics (caesarean section, etc...): 4 hours
- Define situations in which obstetrics should be used.
- Medical treatment used in obstetrics
- Protocol of Caesareans
- Participate in a Caesarean operation
- Reanimation of new-borns
- New-born care

4. Clinical training: 8 hours. During this period, students complete their training in canine reproduction. They should be able to carry out:
- Surgical procedures of sterilisation in male and female (dogs and cats).
- Evaluation of prostate (healthy and sick animals): digital palpation, ecograph
- Testicular Evaluation (healthy animals)
- Reproductive pathologies present during this practical period.

Small Ruminants Reproduction (9 hours) is developed in the Farm of the Faculty and student hands-on activity includes:

1. Heat Control/Direct Mating (2 hours)
- Identify the signs of heat in goats.
- Determine the optimum moment for natural mount.
- Handling of the stud during a controlled mount.

2. Hormonal Control of oestrus cycle(2+1+1=4 hours)
- Technical procedures for the induction of heat and ovulation in goats.
- Selection of reproductive females
- Placement of intravaginal sponges
- Administration of hormonal products

3. Pregnancy Diagnosis (ultrasonography) 35 Days (2 hours)
- By transabdominal ecograph, identify the presence of embryonic vesicles at 35 days of gestation.
- Acquire the ability to differentiate between gestating and non gestating animals.

4. Pregnancy Diagnosis (ultrasonography) 42 Days (1 hour)
- Should, not only be capable of diagnosing a gestation at 42 days, but also observe the sure signs of gestation such as the heartbeat of the embryo
- Differentiate between gestating females and females with hydrometer.

Rabbits Reproduction (7 hours) is developed in the Farm of the Faculty and student hands-on activity includes:

- Prepare the adequate environmental conditions for the correct reproductive handling in rabbits.
- Induction of heat in the female
- Monitor a natural mount
- Artificial insemination
- Diagnose gestation by abdominal palpation and by ecograph
- Induce-control the birth
- Monitor and regularise the lactation-weaning of gazapos

Table 4.1.3.3. Ambulatory Clinics.

Subject	Year	Semester	Clinical Service	Nº of students / Group	Hours / day
Parasitic Diseases	4th	2	Small Ruminants (4 hours)	5	12
			Porcine (4 hours)		
			Rabbits or Bees (4 hours)		
Infectious Diseases	4th	1 and 2	Small ruminants (2.5 hours)	5	12.5
			Porcine (2 hours)		
			Poultry (4 hours)		
			Small Animals (Shelter) (4 hours)		
Fish Pathology	5th		Fishes (4 hours)	5-6	4
Propaedeutics	3rd	1	Equine Ambulatory Clinic (3.5 hours)	2	7
			Ruminant Ambulatory Clinic (3.5 hours)		
Internal Medicine I	4th	2	Equine Ambulatory Clinic (3.5 hours)	2	7
			Ruminant Ambulatory Clinic (3.5 hours)		
Internal Medicine II	5th	1	Equine Ambulatory Clinic (3.5 + 4 hours= 7.5 hours)	2 - 4	11
			Ruminant Ambulatory Clinic (3.5 hours)	2	
Surgery II	4th	2	Equine Ambulatory Clinic (3.5 hours)	2	7
			Ruminant Ambulatory Clinic (3.5 hours)	2	
TOTAL					**60.5**

Describe clinical exercises in which students are involved prior to the commencement of clinical rotations.

Prior to the commencement of clinical practice in the VTH, where the students involved completely in the real clinical activity, students should take the practical hours of Physiopathology, Propaedeutics and Pathology.

- **Physiopathology**: 15 practical hours included Blood collection in Dogs, Cows and Goats; and Laboratory Work: Blood Analysis (Complete Blood Work, Biochemistry Profile, Electrolytes) and Urine Analysis.

- **Propaedeutics**: every student must take the following practical hours: Clinical History, Anamnesis and Clinical Software (2 hours), Physical Examination of Small Animals (2 hours), Physical Examination of Bovine (3 hours) and Physical Examination of Equine (3 hours).

- **Pathology**: every student must take the following practical hours: Necropsy (29 hours), Histopathology (17.5 hours), macroscopic (25 hours) and slaughterhouse organs (3.5 hours).

Outline the student involvement in the emergency and hospitalisation activities of the clinics.

As a general rule, students enrolled in core subjects do not carry out emergency receiving, although they participate in the urgent care of hospitalised patients. Some students carry out livestock practices at the VTH. These students are asked to come to the VTH when the rest of the students of other core subjects are not there, principally during the afternoon and times with no classes.

Students during the period of practical clinics (on the morning timetable) are advised if there are emergencies in the afternoon or night to come to the VTH, something which happens more commonly in the Reproduction service.

The VTH has “Collaborating Students” that are voluntarily enrolled (more active and responsible) on the clinical services, including holidays, weekends and holiday times. The hospital organises the participation of these students. Last year a total of 36 students from the 4th and 5th years were involved in the clinical duties at the hospital as collaborating students.

During the nights (21:00 to 08:00), only one intern stays at the VTH for emergency and hospitalisation activities. Routinely no students are present during the nights.

During the mornings (8:00 to 15:00, the more active clinical hours) at the Small Animal Clinical Services, there are two teachers, one veterinary surgeon (staff) and one veterinary surgeon intern. Also, two collaborating students are enrolled in clinical activity. Every morning the veterinary and/or intern informs the clinicians and students about hospitalised patients. A working plan is designed for every patient and for every day and all the personal and students are involved actively in the clinical activity in the assigned patient.

During the afternoon (15:00 to 21:00) one veterinary surgeon (staff) and one veterinary surgeon intern and at least one collaborating student stay at the VTH.

Specify student participation in the activities of the mobile clinic and indicate whether or not the hours spent in the mobile clinic are included in those in Table 4.2.

Attendance at the Mobile Clinic is compulsory for all students enrolled in the core subjects as shown in Table 4.1.3.3.

Equine Ambulatory Clinic

Every day two students (one from *Propaedeutics* and one from *Internal Medicine II* in the first semester, and one from *Surgery II* and one from *Internal Medicine I* in the second semester), are enrolled at the equine mobile clinic with one veterinary surgeon (staff). Depending on the agenda the time for return to the VTH is variable most days (normally lasting more than 6 hours), however the student time assignation have been standardised at 3.5 hours due to the time for transportation.

The students participate initially in the preparation of the material needed for the day, depending on the scheduled appointments.

During visits the students are taught by the staff veterinarian and the intern on the essentials of horse care, the appropriate approach to horses and equine preventative medicine. Then the students make physical examinations on patients including taking the temperature, eye and mouth examination, heart and lung sounds and motility evaluation. Also, pregnancy diagnosis, endometritis treatment, heat induction, and other activities related to Reproduction are tough.

The students also help perform ultrasonographic examinations. Then the problems are discussed by the students and the veterinarian and a differential diagnosis is elaborated. Then the treatment plan and follow up is explained to students.

Ruminant Ambulatory Clinic

Every day two students (one from *Propaedeutics* and one from *Internal Medicine II* in the fist semester, and one from *Surgery II* and one from *Internal Medicine I* in the second semester), are enrolled at the Ruminant Ambulatory Clinic. Students talk to the veterinary surgeon (staff) in Las Palmas by phone for transportation to the farms in his private vehicle. Depending on the agenda the visits are varied, however the duration of the activity every day.

On a routine basis, the students carry out the following activities: in general they do the handling of the cattle on the farm, and keep the animals still for identification, vaccination and deparasitation purposes. With regard to medical treatment, the students are involved in checking and evaluating cows that have recently given birth, revision of post-birth discharge and cases of metritis, as well as the administration of intrauterine balls. In dry cows, students participate in vaccination and drying activities. With regard to surgical procedures, students take part in major surgery which takes place on the farms themselves, such as dehorning surgery, abomasum surgery and podology (placement of hooves and bandages).

Parasitic Diseases Ambulatory Clinic

Every student has to make three farm visits. One visit to at least one cow farm (4 hours), one visit to at least one pig farm (4 hours) and the third visit (4 hours) can be to rabbit or bee farms (depending on availability).

The following day, the students who have made the visit take their samples to the parasitological laboratory to be processed and diagnosed.

SMALL RUMINANTS (SHEEP AND GOATS)

a)	CLINICAL ACTIVITIES
	1. Vaccination and/or deparasiting of the flock (systematically)
	2. Collect faeces (systematically)
	3. Collect blood samples (occasionally)
	4. Skin samples (occasionally)
	5. Field necropsies(occasionally)

b)	DIAGNOSIS OF PARASITICAL DISEASES
	1. Eimeriosis (systematically)
	2. Tricostrongyloidosis (very frequently)
	3. Strongyloidosis (very frequently)
	4. Estrosis (very frequently)
	5. Protostrongyloidosis (occasionally)
	6. Digestive estodiasis (occasionally)
	7. Tricuriosis (occasionally)
	8. Cysticercosis in small ruminants (occasionally)

PIGS

a)	CLINICAL ACTIVITIES
	1. Vaccination and/or deparasiting of the flock (systematically)
	2. Collect faeces (systematically)
	3. Skin samples (frequently)
	4. Collect blood samples (occasionally)
	5. Field necropsies (occasionally)

b)	DIAGNOSIS OF PARASITICAL DISEASES
	1. Ascariosis (systematically)
	2. Tricuriosis (very frequently)
	3. Balantidiosis (systematically)
	4. Sarcoptic mange (systematically)
	5. Isosporosis (occasionally)

RABBITS

a)	CLINICAL ACTIVITIES
	1. Vaccination and/or deparasiting. Until last year systematically. This year we are visiting a new farm and do not yet do so much handling.
	2. Skin samples (systematically. This year frequently)

b)	DIAGNOSIS OF PARASITICAL DISEASES
	1. Eimeriosis (systematically)
	2. Oxiuriasis (systematically)
	3. Strongyloidosis (systematically)
	4. Psoroptic mange (systematically until last year, this year frequently)
	5. Sarcoptic mange (occasionally)

BEES

a)	CLINICAL ACTIVITIES
	1. Collect panals (systematically)
	2. Collect bees (systematically)
	3. Apply treatment for varroa sp. (occasionally)

b)	DIAGNOSIS OF PARASITICAL DISEASES
	1. Varroasis
	2. Nosemosis

NOTE: Obviously, this is a summary of activities. The most important aspect of the Parasitic Diseases Ambulatory Clinic is to bring the students closer to the reality of parasitical diseases on Gran Canaria in order to interpret the epidemiological context and discuss the most plausible methods according to each farm.

Infectious Diseases Ambulatory Clinic

The main goal of this activity is to provide a direct contact with the daily veterinary activities in the farms, particularly to achieve judgement in order to diagnose and control the infectious diseases. Activities include three visits. One visit to a farm of small ruminants and/or pig farm (4.5 hours); a visit to a poultry farm (4 hours) and two visits of two hours each (2+2=4 hours) to the small animal sanctuary.

Student's activities in the farms include: evaluation of health status of the required farm, description of the main infectious diseases, treatment for every disease, control measures (sanitary methods, vaccinations, etc), sample collection (blood, milk, etc).

In the Island Animal Sanctuary (*Albergue Insular de Animales*), next to the Veterinary Faculty, students begin activities with an inspection of the caged and corralled animals, to offer them appropriate treatment, to medicate for the first time, or continue previously started treatment. If a complicated case is observed which requires a diagnostic test which is unavailable this is communicated to the veterinary surgeon of the sanctuary for admittance in the VTH. In the hospitalisation area of the sanctuary the students give treatment of surgery, learn to remove stitches and clips, attach Elizabethan collars to operated dogs and administer prescribed medicines (generally scar treatment, disinfectants, antibiotics, anitinflammatories, etc.). Students carry out filariasis treatment, extract blood, make serological tests to cats and dogs: filariasis, feline immunodeficiency, feline leukaemia, administer intramuscular and subcutaneous injections, adjust pharmacist doses, learn how to handle animals, etc. The clinical and handling development also

takes place in the cat hospitalisation zone. The reception, marcation or identification takes place of cats and dogs which arrive in the Las Palmas and Arucas town council collection vehicles. The animals are inspected, treated and cured according to each case. Finally they are deparasited and vaccinated according to the specie and age of the animal in question, are placed in cages where they pass quarantine or wait to be reclaimed by their owners. Students usually work in pairs, one to hold the animal and the other to administer, so all students usually work all sessions.

Fish Pathology

Students make one visit to a fish farm (4 hours). The students, in 14 different groups, carry out a general inspection of the different batches and in the case of there being pathologies, are responsible for the administration of medication (antibiotics or antiparasites) to the batches. Students also carry out vaccinations (by bath or by intraperitoneal) and taking samples of sick animals for laboratorial diagnosis.

4.1.4 OBLIGATORY EXTRAMURAL WORK

These are training periods that are an integral part of the curriculum, but which are taken outside the Faculty, for instance with practitioners, on farms, or with commercial or government organisations.

Please indicate the guidelines pertaining to this activity, and the manner by which it is assessed.

As previously mentioned, a total of 150 hours must be taken in *Pre-professional Training I* and *Pre-professional Training II* by all the students. These are core subjects of the veterinary studies in the ULPGC. Students are enrolled in Veterinary practice developed mainly in other institutions or professionals in the different fields of the veterinary practice to ensure one of the aims of the veterinary training; to ensure that they are qualified to practice. Extra-mural practice is a supplement to and not a substitute for the instruction provided at the veterinary school. The allocation of students in practices in other institutions for veterinary training is encouraged so long as there is adequate provision for quality control. Extra-mural practical training form part of a full-time veterinary course and it is directly supervised by the Veterinary Faculty by the ***Extramural Practices Committee***.

Every student is free to elect the centre where to develop these hours in veterinary clinics or in the farms depending on their interest. Also some practising with a veterinary hygienist working on Food Industry is offered. Due to the difficulties for completing the hours in the offered private veterinary clinics or hospitals, the VTH and some clinical departments have been offered as an elective centre, but not recommended in order to complete the objectives.

Main Objectives:

1. - Acquire professional experience of the different veterinary activities.
2. - Knowledge of the “real work” of the different veterinary activities.

Specific objectives (depend on the student election):

1. - Knowledge of the manner of working of a veterinary surgeon in the Clinic.

2. - Knowledge of the manner of working of a veterinarian in the Food Industry.
3. - Knowledge of the manner of working of a veterinarian in a Farm.

Every student has an assigned tutor depending on the kind of centre elected: Small Animal clinics, Large Animals clinics, or Food Industry.

There is a specific committee belonging to the Veterinary Faculty, the Extramural Practice Commitee, which co-ordinates the activities of the Pre-professional Training Subjects and tutors. Also, the Vice-Dean of Students co-ordinates all the procedures: assignation of tutors, assignation of centres, sign of agreements with the centres, etc. The common general procedure has been approved by the Commitee:

General Procedure

1. Once the centre/veterinarian has been chosen for the Practices, the student must go to Administration to pick up a copy of a document which should be filled in, stamped and returned to Administration to sort out insurance and the student in practice credentials.

2. The period for carrying out the practicals should never be more than two months. If for any justified reason it needs to be for a longer time, it is necessary to contact the Vice-Dean of Students.

3. When the credentials are picked up, a Teacher Tutor is assigned to the student.

4. The procedure to follow can be found in the Faculty website: Students and University Extensions> Practicals I and II > where the procedure record, the dietary model and the clinical questionnaire can be found.

5. The student is remembered that, once assigned, it is compulsory to contact the tutor before beginning the practicals.

Procedure for Making Records

The records can be in two parts: one compulsory and one optional.

1. Compulsory
Made by a diet sheet where all daily activities are shown, in the form of a diary or similar (the webpage of the Vterinary Faculty has included an example model in the Practicals section). One sheet must be filled every day.

Each sheet should show:

- The centre where the activities were carried out (a stamp can be used as a substitute)
- Activities carried out on a set day
- Signature of the veterinarian or technician responsible.

Every daily sheet should be accompanied by a brief summary of the practise carried out on the back, which will be debated in the interview with the tutor.

2. Optional
Any other work in the form of a power point presentation.

All activities shown on the diet sheet can be debated in the personal interview with the tutor.

Each student must hand in to the veterinary surgeon or responsible technician under who the practical period will take place a brief questionnaire which will be used to evaluate the period. This questionnaire must be handed in to the tutor in a sealed envelope.

The co-ordinator of each area will inform the other tutors of the basic criteria necessary to carry out objectively the final interview with the student to finish the practical period. But the independence of each tutor must be maintained when it comes to evaluating the results presented by the students in the personal interview.

Evaluation Criteria

The evaluation of this subject is based on three concepts:

- the content of the dietary sheets
- a series of general questions, co-ordinated and specific to each area
- a series of specific questions from each tutor.

In function of these aspects the final mark shown will be a composition of the following percentages:

- 35%: the report of the veterinary surgeon overseeing the student.
- 40%: the records presented by the student
- 25%: personal interview with the student in which an optional PowerPoint presentation can also be evaluated if the student decides to do one voluntarily.

In order to pass this subject it is compulsory to pass the part of the report of the veterinary surgeon overseeing the student.

Table 4.5: Obligatory extramural work that students must undertake as part of their course.

Nature of work	Minimum period		Maximum period		Year in which[1)] work is carried out
	hours	% of total study time	hours	% of total study time	
Pre-professional Training I	75	2,25% (75/3330)	75	2,25% (75/3330)	4th
Pre-professional Training II	75	2,25% (75/3330)	75	2,25% (75/3330)	5th

[1)] If these periods of extramural work take place during vacations, then the preceding academic year should be entered in the last column of Table 4.5

4.1.5 SPECIFIC INFORMATION ON THE PRACTICAL TRAINING IN FOOD HYGIENE

Describe arrangements for teaching in a slaughterhouse and/or in premises for the production, processing, distribution/sale or consumption of food of animal origin.

Indicate the distance to slaughterhouses where students undergo training, and the species covered. Outline the structure and the frequency of these visits (group size, number of trainers, duration, etc.).

4.1.5.1. Slaughterhouse

In order to complete the teaching in the slaughterhouse of the island was necessary to implement an agreement between the University and the Canarian Health Department (*Consejería de Sanidad del Gobierno de Canarias*) because the authorised veterinarians in the slaughterhouse depend on this Department. Therefore, two veterinarians of the slaughterhouse are teaching staff of the Faculty (partial time).

A total of 15 practical hours of the subject ***Food Hygiene Control and Inspection*** is taken in the slaughterhouse. During 3 days, Monday, Tuesday and Thursday, one group of 6-7 students assists to the slaughterhouse from 7:30 to 12:30. Each group is assisted by one of the teachers (slaughterhouse veterinarians that are two Official Veterinary Inspectors).

During the visits, students attend to all the sacrifice and inspection processes (antemortem and postmortem) in the different species (poultry, bovine, caprine, ovine, porcine and rabbits):

- Students view the different technics for sacrifice depending on animal specie and age.
- Sacrifice steps according to the different species.
- Diagnostic and laboratory control, for example, *Trichinella spiralis* in porcine carcasses.
- Method for sample collection and remission to laboratory, specifically for BSE diagnosis.
- Veterinary Certification and Report Writing.

- Study of Storage of Carcasses and refrigerating system.

The Slaughterhouse is 22 km from the Faculty (25 minutes), but 10 km from Las Palmas de Gran Canaria City centre (12 minutes).

4.1.5.2. Food Industries and Official Veterinary Inspection

A total of 10 practical hours of the subject ***Food Hygiene Control and Inspection*** is taken in Food Industries and Official Veterinary Inspection. During 3 days, Tuesday, Wednesday and Thursday, one group of 6-7 students assists to a Food Industry from 9:00 to 12:30. Each group is assisted by one of the teachers.

1. Border Point of Inspection (PIF)

The Border Point of Inspection is an Official Veterinary Inspection Centre controlled by the Ministry of Health and Food. Inspections of all types of food which come to the Canary Islands from non-EU countries take place here. Every Tuesday from 9am to 12.30 pm, students, accompanied by a teacher, visit the PIF. The practical begins with a 45 minutes talk in which the PIF's activities are explained, as well as the rules and regulations of the centre, and the contents of the inspections which the centre makes. After this, students go to carry out the inspections of the produces that have arrived that morning. During the visit we are helped by some of the Official Veterinary Inspectors. We try to ensure that each inspection contains meat, fish, fruit and converses as a minimum.

The Inspection consists of:

a. Document control: Reading the documentation which accompanies each container, during which facts are checked, and that the EU legislation for the importation of that produce is fulfilled. The students have access to the official documents to read.

b. Identity Control: Once the produce is removed from the transportation container, the information on the food labels is checked, both on the outer and inner packaging. They must match the documents which accompany the produce.

c. Physical Control: The produce is then physically examined. After opening the packaging, the food stuff is examined by temperature, organoleptic test and the identification of the piece of meat or fish to see whether or not it is fit for human consumption according to the corresponding legislation.

d. Once the refrigerated container has been emptied, the characteristics and conditions that these containers should have are explained.

2. Food Factories

We have organised visits to six food factories, all in Las Palmas de G. C., belonging to different sectors of food production. Each year the centres can vary depending on availability. They are usually the following:

1. TIRMA: Chocolate, biscuits, sweets and coffee factory.
2. KALISE - MENORQUINA: Ice cream and dairy desserts factory.
3. JC DAVINIA: Meat products factory.
4. EMBOTELLADORA DE CANARIAS: Soft drinks factory (Pepsi- Cola).
4. ACEICA: Seed oil and vinegar bottling plant. (SOS, Cuétara, Koipe).
5. COMERCIAL VELÁZQUEZ: Food distribution and dried fruits factory.

During the factory visits, the same routine is maintained. Every Wednesday from 9am to 12.30pm and Thursdays from 9am to 12pm, the visits take place, where the following work is carried out:

a. On arrival at the factory for the first 60 minutes in a prepared room for the visits the students are instructed on the rules of behaviour in the centre and the production process of each food group is explained, creating a flow chart of production and packaging. Special emphasis is laid on the autocontrol system of the industry (HACCP) identifying possible dangers in each stage and the critical points of control.

b. Visit to the production plant: We go on to look at the production and packaging process, explaining, in situ, the technological and hygienic characteristics of each process.

c. After the visit to the plant, we move to the quality laboratory where a laboratory technician explains to the students the procedures of analysis of each food produced.

A total of 3 practical hours of the subject ***General Food Hygiene*** is taken in Food Factories. Each group is assisted by one of the teachers.

a) Inspection and Control in Food Establishments of Collective Catering

During one morning, in a food establishment of collective catering, students carry out the normal activities of inspection and control usually carried out by a health inspector or hygiene technician. The student evaluates *in situ* the hygiene-sanitary conditions of the establishment, carrying out a survey in which the following aspects are covered:

- Facilities: Surrounding area and access
- Kitchen facilities
- Equipment used
- Food handling personnel
- Cleaning plan: Water + Cleaning-Desinfection-Plague Control.
- Bathrooms and changing rooms

With the results they have obtained the students learn how to make a full report in which possible hygiene-sanitary deficiencies are outlined, as well as the corrective measures which should be applied. Their evaluations are also seen outlined in graphic form by way of a computer programmes, showing visually the global hygienic evaluation and detailed items, highlighting those aspects in which the greatest hygiene-sanitary deficiencies were detected.

b) Inspection and Control in vending machines.

The students carry out the specific Quality Control activities of the product dispensed by a variety of vending machines (sales of solid products, hot drinks, cold drinks). They carry out an *in situ* evaluation of the hygiene-sanitary condition of the machine, having access to its interior, as well as to the products it offers. The student carries out a survey in which a variety of hygienic aspects are evaluated which outline the quality of these services.

A total of 16 hours in the subject **Food Science & Technology** is taken in three different Food Factories: Meat Factory, Cheese Factory and Honey and Olive Oil Factory. In these food factories the students:

- Learn the production technology of traditional cheese from obtaining the milk until the production of the cheeses. To know and to handle the machinery used in the work to produce traditional cheese, as well as techniques of maturing, refining and labelling the cheese.
- Learn the production technology of traditional meat products such as chorizos (spicy sausage), morcillas (black pudding) and chorizos parrillleros. To know and to handle the machinery used in the work to produce traditional meat, as well as techniques of funnelling and labelling the meat.

- Learn the technology of conditioning, maturing and bottling of honey from the collection of raw honey blocks to the bottling and labelling of the honey in jars. To know and to handle the machinery used in these processes.
- Learn the technology of conditioning of olives for their later use in olive oil, from picking and extracting to bottling and labelling of the olives. To know and to handle the machinery used in these processes.

4.1.6. Ratios

These must be delineated from Table 4.1, 4.2 and 4.3.

For explanation about ratios, see the section 'Main Indicators' of **Annex I.** The ratios should be expressed by taking the numerator as 1 divided by the sum of figures for the denominators.

As indicated in tables 4.1 to 4.3, the figures for the denominators are defined as follows:

Figure	Total no teaching hours
A	Lectures
B	Seminars
C	Self directed learning
D	Laboratory and desk based work
E	Non-clinical animal work
F	Clinical work
G	Other

Please give the following values:

R6. $\frac{\text{Theoretical training } (A+B+C)}{\text{Supervised practical training } (D+E+F)} = \frac{1817.5}{1265.0} = \frac{1}{0.69}$

R7: $\frac{\text{Clinical Work } (F)}{\text{Laboratory and desk based work + non clinical animal work } (D+E)} = \frac{423.5}{841.5} = \frac{1}{1.98}$

R8: $\frac{\text{Self directed learning } (C)}{\text{Teaching load } (A+B+C+D+E+F+G)} = \frac{50}{3330} = \frac{1}{66.6}$

4.1.6.2. Special Indicators of Training in Food Hygiene/Public Health

$$\textbf{R9:}\quad \frac{\textit{Total no.curriculum – hours Food Hygiene / Public Health}}{\textit{Total no. hours vet. curriculum}} = \frac{270}{3330} = \frac{1}{12.33}$$

$$\textbf{R10:}\quad \frac{\textit{Total no.curriculum – hours Food Hygiene / Public Health}}{\textit{Hours obligatory extramural work in veterinary inspection}} = \frac{270}{40} = \frac{1}{0.15}$$

4.2 COMMENTS

Please comment on:

- the way in which the veterinary curriculum prepares the graduate for the various parts of the veterinary profession, especially under the specific conditions prevailing in your country/ region.
- the way the curriculum is structured and reviewed.
- the major developments in the curriculum, now and in the near future.
- the local conditions or circumstances that might influence the ratios in 4.1.6.

From data shown at Table 4.2, the existing veterinary curriculum at the ULPGC distributes 37.1% of the contents in Basic subjects (7.8% basic subjects + 29.3% basic sciences), 40.4% in Clinical Sciences subjects (including *Pre-professional Training*), 14.2% in Animal Production subjects and 8.1% in Food Hygiene & Public Health subjects. This syllabus provides the students with basic general training which is flexible and balanced and produces graduates who are skilled in many areas. This versatility means that they can rapidly enter into the labour market as they are able to adapt the different professional profiles which Society currently demands (Veterinary Medicine, Animal Production & Animal Health, and Food Science & Technology). Notwithstanding, the wide scope of the veterinary profession, and the fact that, by law, the veterinary curriculum is Spain is a five-year Degree programme produces and undesirable constriction in the development of the curriculum. Moreover, the rate at which knowledge is advancing in all these areas and the growing need for specialisation makes continuing lifelong education essential for all students, even those holding Postgraduate Degrees.

Assuming that Veterinary Professionals must currently be prepared to deal with more areas than just the classical clinical one, our Syllabus is designed to combine the acquisition of basic knowledge

in all the fields of Veterinary Science (through the core subjects) with more advanced training in one given field (through electives and optional subjects). Since we ensure than an adequate level in essential veterinary disciplines are taught in the core subjects, our students can the design their own study programme (Minor) by choosing certain electives in order to develop a more profound understanding in their own areas of interest.
In the recent years, many changes have occurred. At an international level food crises such as BSE, dioxins and others, as well as the emergence or re-emergence of animal pathogens (Classical Swine Fever, Foot & Mouth Disease, Blue tongue, etc.) and Zoonoses (West Nile Virus, etc.) indicate that more emphasis should be put on food safety for the whole food chain, public health issues and epidemiology. In addition, the small animal and exotic pet sector is becoming increasingly important and this must be reflected in the curriculum. Moreover, the level of awareness that the general public has about environmental issues and animal welfare suggest the concepts such as sustainable livestock production, waste management and welfare in animal production must obviously be promoted.

Aside from classic and emerging areas of responsibility, the Veterinary Profession must diversify into new fields such as the Handling and Management of Zoological Nuclei, Wild and Hunting Fauna, Natural Reserves and Animal Parks, Business Management, Research, Diagnostic Laboratories, and such. These fields have not always been clearly included in the profile of the Veterinarian and will have to be reflected in the curriculum.

In the Canary Islands, and especially at the ULPGC with its high degree of specialisation in Marine Science, the teaching of Veterinary Science should not shirk from reality, but should embrace it. Within the curriculum are three obligatory subjects, and some optional ones which give graduates greater knowledge about veterinary activities compared to graduates from other universities. Without forgetting about all the requirements of a professional vet, the ULPGC graduate should have an education in common with all the veterinarian of the EU which allows them to act as professional vets as defined by the directive 36/2005/UE. Nevertheless, we believe that we should give our graduates a certain differentiation, based on our geographical position in the Atlantic and our close marine resources. This is why the current curriculum has three compulsory subjects linked to Aquaculture and marine resources, as well as offering various optional subjects related to Marine Science. Although to date Aquaculture has not had a large demand among veterinarians, in the future the greater level of specialisation among veterinarians will give impetus to this aspect of the profession. In new directives from the Ministry of Science and Innovation the teaching of Aquaculture has been incorporated into the degree of all Spanish universities.

Therefore ULPGC has shown itself to be open to training vets with a certain degree of specialisation to work in not only the Canary Islands, and in Europe, but also in any part of the world.

Another point of interest in Canarian society with reference to farming is goat farming. Goat farming has been of great rural economic importance in the archipelago throughout the centuries. In the Canaries, in 2006 (the most recent census) there are a total of 115,000 heads in the province of Santa Cruz de Tenerife (islands of Tenerife, La Palma, La Gomera and El Hierro), whilst in the province of Las Palmas (islands of Gran Canaria, Fuerteventura and Lanzarote) the census showed 252,000 heads (of these 110,000 on Gran Canaria). The Canaries produce 54 millions litres of goat milk. Recently, the General Director of Agriculture of the EU, Mr Lars Hoelgaard, in a visit to the Archipelago thought that the Canaries should consider the idea in the future of developing the economic profitability of goat farming instead of the cultivation of tomatoes and bananas. In the future, the farming sector, and its subsection goat farming can be a competitive alternative, especially in terms of genetic investigation which could lead to implanting indigenous breeds in other countries.

In the Canary Islands, goat production is noted for its great importance and social impact that represents in the community, with more than 15,000 families living directly or indirectly from this activity. At the same time, it has an important economic impact too, contributing to the Gross National Product (PIB) of the region, making it the second largest specie in terms of income generation in the herding sector. But the conditioning zootechnical factors have forced the goat sector to evolve rapidly in recent years in terms of exploitations, passing from extensive farming to semi-intensive to completely intensive. This new productive situation has made it necessary to create intensive model farms to facilitate the technological transfer to a sector which needs to renew itself. Therefore, it is natural that the Veterinary Faculty of the ULPGC should be close to this situation, there being a difference in the curriculum with special attention to goat farming especially as a model animal to study ruminants, without forgetting the importance of cow farming on a world level and its particular pathologies and clinical medicine which students should know.

Evidently, all these objectives cannot be met without a substantial reorganisation of the curriculum. Future developments will be centred on the implementation of the Bologna Declaration. This process of European convergence will most probably lead to major changes in the structure of the curriculum as well. The most significant improvements that can be made at this time are a decrease in the number of in-class hours (mainly theoretical hours) and an increase of self-learning, supervised work and practical/clinical activities.

The implementation of the Bologna Declaration will also help to alleviate a severe problem that affects student performance. With the current curriculum, students are supposed to be present 4,150 hours in five years (830 hours/year or 26.7 hours/week). With this figure in mind, if students dedicate a similar number of hours of work to preparing the exams, presentations, etc., the total work load for a year is 1860 (or over 52 hours/week) and, probably, more. The intensity of this workload must be decreased. This can be done by further promoting self-learning and autonomous work and also by reducing the number of theoretical lectures.

In fact, this has been one of the objectives of the pilot project of adaptation to the ESHE, in which a change in the teaching methodology was proposed, and especially a reduction in the theoretical teaching load. In this way we have moved from a plan which supposes a theoretical load of teaching of 1,845 hours (55.4%), to a total of 1,563 hours of theoretical teaching classes (46.9%), and this adaptation has not been completed in all five years, not even has it been carried out efficiently in all first and second year subjects. On the other hand, many subjects use the virtual campus as an e-learning tool, however it is not possible to count the quantity of learning that students to by computer currently, so the results of the ratio calculated cannot be taken as an exact value, which in reality could be very different.

In this context, it is difficult to choose a satisfactory model which allows for the acquisition of both basic and specific professional knowledge that is structured and orientated to facilitating the student's integration into the labour market. In February 2005, the Spanish Agency for Quality Assurance and Accreditation (ANECA) published the so-called "Libro Blanco" for the Veterinary Profession with the aim of providing studies and potential practical models for the future design of a degree adapted to the ESHE. All eleven Spanish Universities (nine public and two private) have taken part in the preparation of this report, which takes into account the opinions of the Conference of Deans of the Veterinary Faculties in Spain and the General Council of the Veterinary Colleges of Spain. This project brings together many fundamental aspects in the design of an undergraduate course model: analyses of corresponding or related studies, studies of employment opportunities, professional profiles and competences, etc.

The essential recommendation of the project is to establish a five-and-a-half-year University degree comprised of 300 ECTS credits + 30 additional ECTS credits for a practical fieldwork period.

All these changes imply an adjustment in teaching methodologies, which should become learning-based rather than content-based and should establish objectives in accordance with professional

competences. The teaching staff has to adapt to the new updated standards which emphasise learning from the perspective of the workload that it implies for the student. On the one hand, this focus will help to improve the understanding that students acquire, but on the other its practical application will make them better prepared for the professional market.

The Royal Decree 1393/2007 has recently been passed in Spain; it outlines the management of official University Education in Spain. This Royal Decree adopts a series of measures, compatible with the ESHE, that provide for a more flexible organisation of University Education, promote diversification in curricula, and allow universities to use their own ability to innovate their strengths and opportunities in order to respond to the demands of society in an open and constantly changing world. The new organisation of University Education not only responds to a structural change, but also fosters change in teaching methodologies focusing on the process of student learning in context and on making them aware of the need for their active participation in lifelong learning. The acquisition of skills on the part of students should be at the heart of any curriculum leading to the obtaining of a degree; however, it should be focused on expanding- not excluding- the traditional approach based on content and teaching hours. But this Royal Decree limits the Veterinary Degree to 300 ECTS and five years in duration, while the Conference of Deans of the Veterinary Faculties in Spain maintains its request for 330 ECTS and 5.5 years.

Compared to other Veterinary Faculties in Spain, our Faculty has a limited number of students which allows us, especially in practicals, and specifically in clinical practicals, to reduce group numbers to less than six, which in turn allows a personalised tuition for students and the highest quality sessions.

One of the drawbacks of the current curriculum is the wide difference in workload that students have between years, which is especially high in the fourth year. This enormous workload, especially in practical credits, makes difficulties, given that the students find it hard to co-ordinate activities between subjects. This problem is greater for students who are enrolled in course of different years or are enrolled in too many credits.

Another difficulty in imposing the current plan of studies is the development of the subjects *Pre-professional Training I* and *Pre-professional Training II*. Although the Faculty has made an enormous effort to sign agreements with these centres, companies and organisms, an excessive number of agreements is necessary to ensure that all students can attend the centre of their choice, so that on occasions students have to achieve these credits, which should be done off campus, in our own VTH.

4.3 SUGGESTIONS

If the denominators in 4.1.6 for your Faculty are not meeting the range as indicated in Annex I, Supplement A, what can be done to improve the ratios?

The reduction of theoretical hours on the curriculum is one of the consequences of the adaptation to the ESHE. In designing the new study plans which will begin in a few months we have to consider a reduction in these kinds of activities and use them exclusively to obtain the learning objectives which can be achieved using this teaching method.

The optional credits in the study plan should be there provided that a true option exists and that students have a free choice within the outlines of different professional profiles for veterinarians. This requires a wider selection of options with various outlines. At the same time it is proposed that, for each outline, the optional offers should be at least double or triple the number of credits required by the student.

The R7 ratio is low. Of the total of hours in clinical subjects, some subjects are not dedicated 100% to practical credits. Therefore, clinical subjects should spend the greatest percentage of their time dedicated to clinical activities, particularly on farms and/or at hospital. Currently various clinical subjects include laboratory and classroom practicals, principally concerned with laboratory diagnosis. This should be reduced, and *hands-on* activities increased with sick animals in a real clinic, which improves the clinical training of the students.

CHAPTER V

Teaching and Learning: Quality and Evaluation

5.1 FACTUAL INFORMATION

5.1.1 The teaching programme

Describe the measures taken to ensure co-ordination of teaching between different departments, sections, institutes and services.

Teaching co-ordination is a responsibility of the Vice-Dean of Teaching Affairs and the Teaching Affairs Committee (CAD).

Every year the Faculty must approve the Teaching Organisation Plan which includes, for every subject, the Teaching Project that includes following information: Objectives of Teaching, Syllabus, Methods of Teaching, Assessment of Learning and References. This information is provided every year by the different Departments and approved by the Teaching Affairs Committee and the Faculty Board during the year before. Therefore there is same degree of freedom to introduce changes in the way of teaching the subjects, but not the total of credits. In order to complete the process of development of the Teaching Organisation Plan, the ULPG have approved the "Regulation for Planning the Teaching".

One of the responsibilities of the Teaching Affairs Committee is to guard the good developing of the Teaching Organisation Plan of the Faculty. All the information and documents are published can be amended by the Teaching Affairs Committee. Before approving the teaching plan for the following year, the teaching plans of each subject are sent to all members of the Teaching Affairs Committee and can be consulted and informed by the committee.

To make the teaching plan year after year, after hearing the Departments, which are the responsible for the development of teaching, the Vice-Dean of Teaching Affairs proposes the distribution of credits (balance of hours between the different practical teaching methods), size of groups, timetable and exams calendar to the Teaching Affairs Committee which studies the proposal and approves it.

During the development of teaching activities, the students and teachers can make suggestions or complaints related to academic activities, with particular reference to the co-ordination between subjects to be looked at in the Teaching Affairs Committee. This commitee is the meeting point for teachers of different subjects from different departments, and so these meetings propose co-ordination agreements between subjects. On the other hand, subjects within the same department are also co-ordinated, informally and formally in meetings of the Departmental Boards.

To make the teaching plan, the teachers with different areas of knowledge agree on a teaching plan for the following year, this information is passed to the Vice-Dean of Teaching Affairs and a teaching plan is written which includes the teaching project for each subject.

The Teaching Affairs Committee

The Faculty is charged with the organisation of learning and academic, administrative and management processes leading to obtaining official degrees (art. 8.1, LOU), whilst the Departments are organs charged with co-ordinating the teaching of one or more areas of knowledge, according to the teaching programme of the University (art. 9.1, LOU).

As stated in the Chapter 2-Organisation, the Teaching Affairs Committee is made up of 60% teachers, with a minimum representation of teachers from all core subjects, or a minimum of 5% of total degree content, and the other 40% students. In particular, the following competences belong to the Teaching Affairs Committee:

1. Inform previously about study plans and their modification.
2. Inform the teaching projects of the subjects of each degree sent to the department in the date indicated in the Academic planning Regulations.
3. The Committee will control the correct vertical and horizontal co-ordination of the subjects.
4. Outline the lines of action of the centre which affect the degree teachers.
5. Inform the proposal of calendar and final exam timetables corresponding to the ordinary and extraordinary sittings of each academic year.
6. Propose general criteria for the convalidation of subjects, especially those taken and passed in other universities.
7. Inform about proposals to contract staff that the department makes in relation to the teaching activities of the centre, and the incorporation of new staff in each subject.
8. Inform about undoubling groups in the overcrowding of students in classrooms, or other circumstances that require it.
9. Inform about the teaching ramifications of leave and substitution of original teachers.
10. Inform about free chosen subjects which the department and other entities offer.
11. Carry out any kind of other function which the current rules permit.

Describe the pedagogical approach of the institution. In particular, describe the use of newer approaches, such as problem-based learning, interactive computer-assisted learning, etc.

The pedagogical policy of the Faculty and the University is to implement and impulse learning orientated student-centred approaches as well as to apply and develop content of the Bologna Declaration (stimulating self learning, problem solving, team working, etc.). To achieve this, the types of academic activities of the Veterinary Faculty adapted to the ESHE are as follows:

I. CLASSROOM ACTIVITIES:

1. Theoretical Classes:

a. **Teacher Classes (CM)**. So called because the teacher talks directly to the students. The sessions can be expositions, explanations and/or demonstrative in content (the presentations can be chosen by the teacher, or students' work, etc). The size of the group depends on the physical capacity of the classroom, and is a single group.

b. **Seminary-Workshop (S)** So called because in this activity knowledge is built up through interaction and activity. They are monographic sessions supervised with shared participation (students, teachers, experts, etc.) The group size is variable from whole to small groups (of not least than six students to help interaction).

2. Practical Classes: The practical classes are so called because they show the students how to act. The practical classes are classified as follows:

a. **Problem Practicals (P)** are defined as group work to resolve problems. The size of the group is variable and can be from eight students per group to the whole class, although this is not recommended to avoid confusion with Teacher Classes.

b. **Classroom Practicals (A)** are defined as group work in the classroom. These practicals include work with documents and the formulation of ideas without handling animals, organs, objects, products or documents (e.g. work with papers or documents, clinical case studies, diagnostic analysis, etc.) The size of the group varies between eight and 15 students.

c. **IT Practicals (I)** are defined as group work in the Computer room. The size of the group is defined by the capacity of the room, usually 15 to 20 students per group.

d. **Microscopy Practicals (M)** are defined as group work in the Microscopy room. These practicals include sessions where the students, use microscopes to study histological, histopathological and parasitoligical samples. The size of the group varies between eight and 15 students.

e. **Laboratory Practicals (L)** are defined as group work in the Laboratory. These practicals include sessions where the students develop by themselves laboratory experiments. At the same time it includes work with healthy animals, with objects, products, samples (E.g. animal handling, bacteriological practicals, physiology or biochemistry, meat inspection, etc.). The size of the group is a maximum of eight students per group.

f. **Clinical Practicals (C or R)** are defined as clinical practical work carried out in the Veterinary Teaching Hospital, as well as clinical practical visits, developed mainly with ruminants, horses, pigs and poultry. The practicals include work with healthy animals (propedeutic) and clinical cases (individual or collective patients) which includes a protocol or work plan, supervision by a teacher and offering services. The size of the group is less than five students.

g. **External Practicals (E)** are defined as such because in this activity students put into practise extramurally what they have learnt. Although by definition it is restricted to training carried out in companies and entities outside the university (attendants practicals, etc) it includes extramural practicals or visits to companies, entities or organisms (e.g. slaughterhouses, food factories, farms (non-clinical practicals) fish and marine installations. The size of the group is variable, from individual in the case of company practicals (E.g. *Pre-professional Training I* and *Pre-professional Training II*) up to large groups according to the nature of the activity.

3. Other face to face activities:

a. **Evaluation** includes official exam sittings (Ordinary, Extraordinary and Special), as well as all activities which intend to evaluate knowledge acquired by the students.

b. **Tutorials (T)** consist of personalised attention to students. They are personalised help sessions between the teacher-

student in which help, guidance and support is offered to one or various students in the teaching-learning process. Although the majority of these sessions are individual, they can take place in larger groups also

II. NON FACE TO FACE ACTIVITIES:

1. Tutored Work. Also called "study and group work". It consists of learning together through the preparation of seminaries, lectures, investigations, work, records, obtaining and analysing data etc., to present or hand in in class through the work of the students in group. The group size is variable.

2. Independent Activity. This is defined as self study by the individual. This activity intends to develop the capacity for self-learning through the same methods as the previous category, but carried out individually, including also personal study (preparing for exams, library studies, complementary lectures, problem solving and exercises, etc.) which are fundamental for autonomous learning. It includes work in the virtual campus.

e-Learning

Important pedagogical advances have also been made with the implementation of new technologies applied to teaching, mainly with the use of ULPGC Virtual Campus, based on Moodle. Moodle is a free software e-learning platform (also known as a Course Management System (CMS), or Learning Management Systems (LMS), or Virtual Learning Environment (VLE)). It has a significant worldwide user base with 38,896 registered sites with 16,927,590 users on 1,713,438 courses (as of January, 2008).

Moodle is designed to help educators create online courses with opportunities for interaction. Its open source license and modular design means that people can develop additional functionality. Development is undertaken by a globally diffused network of commercial and non-commercial users, streamlined by the Moodle company based in Perth, Western Australia.

The platform has been adapted and included in the ULPGC website, almost all subjects use the Campus Virtual as a work tool to help students with documents for study and many also use it to interact with other students through constructing activities which allow them to build knowledge.
Moreover, both Faculty and University policy has been to reduce traditional teaching lectures by increasing hands-on activities, either

in computer rooms, laboratories, or in clinical practice. However, the goal is difficult to achieve because of the current Spanish legislation for veterinary studies which dictates the number of theoretical lectures that students must attend. At this time, major changes in this legislation are being developed. The changes will lead to a higher degree of autonomy for each university and will make the implementation of new approaches easier.

Indicate the extent to which course notes are used to supplement or substitute for the use of standard veterinary textbooks.

Students need documents for many subjects, in the form of photocopies, website links or presentations with recommended bibliographies.

In the teaching plans of the subjects there is a basic bibliography (the books that the teachers consider fundamental to the course study) as well as a recommendation of books, which at times due to its excessive length is not consulted by students, which makes it necessary at times to compile the information in easy to read documents prepared for students to study.

Describe (if applicable) any established or contractual arrangements that support undergraduate teaching between the Faculty and outside bodies, e.g. farms, breeding centres, practitioners, state veterinary services, factories/processing plants, outside laboratories, etc. Briefly describe how these arrangements work out in practice in terms of the contact this provides for all students or for selected students.

Among the agreements signed with external entities we would like to highlight the agreement between Universidad de Las Palmas de Gran Canaria, the Canarian University Foundation of Las Palmas (FULP) and the Official Veterinary College of Las Palmas for the development of action plans together in the Veterinary Teaching Hospital signed in 2004. This agreement has allowed joint financiation of medical-surgical operations at the hospital on patients from the Insular Animal Sanctuary (*Albergue Insular de Animales*) which is very close to the Faculty, which has brought about a considerable increase in the specific cases attended in the VTH, and particularly has brought about an increased percentage of clinical activity carried out by students. This action complements the specific cases, which according to the signed agreement can come exclusively from the university community, the cases attended in service of the Remission of Cases Protocol, from veterinarians, and from cases which arrive for a second opinion, expressly consented by a veterinary or not.

In other areas, this agreement has allowed practical activities to be carried out in various professional sectors within the veterinary world, such as small animal veterinary clinics, professionals from the large animal clinic, research centres, Aquaculture centres, food control, among others. This practical activity is equivalent to, in one way, the current study plan, in which 4th and 5th year students, within the subjects of *Pre-professional Training I* and *Pre-professional Training II*I have to do 75 hours a year tutored by Faculty teachers and under the guidance of external professionals.

In the same way, the current study programme requires a number

of free chosen credits which students can obtain thanks to carrying out practicals in non-lecture periods (summer, Easter, Christmas). In this way, and continuing a similar methodology, students carry out hours in centres outside the Faculty, learning different facets of professional veterinary studies under the supervision of veterinarians during their working day. These hours, in determined hours set for such activities, can de convalidated for free chosen credits at the rate of 20 hours:1 credit. The offer of centres is wide if we take into account that students are received throughout the Canary Island archipelago, as well as some offers from centres in mainland Spain. The number of places in the two provincial capitals should be highlighted, being among the highest demand for students.

The following is a list of establishments that support undergraduate teaching:

GRAN CANARIA

Small Animals:

- HOSPITAL VETERINARIO FELICÁN
- HOSPITAL VETERINARIO LOS TARAHALES
- HOSPITAL VETERINARIO MOGÁN, S.L.
- CENTRO VETERINARIO ARAUNA
- CENTRO CLÍNICO VETERINARIO ARUCAS/ JUBENESPA CANARIAS S.L.
- CENTRO VETERINARIO DUNAS S.L.
- CENTRO VETERINARIO GUANARTEME
- CENTRO VETERINARIO INSULAR
- CENTRO VETERINARIO LA ALDEA
- CENTRO VETERINARIO LA ATALAYA
- CENTRO VETERINARIO LA LUZ
- CENTRO VETERINARIO LA RAMBLA
- CENTRO VETERINARIO PARDELA
- CENTRO VETERINARIO RAZAS
- CENTRO VETERINARIO SIXTO HENRÍQUEZ, S.L.
- CENTRO CLÍNICO VETERINARIO TAMARACEITE
- CLÌNICA VETERINARIA ALBÉITAR
- CLINICA VETERINARIA ARINAGA
- CLÍNICA VETERINARIA ATLÁNTICO
- CLÍNICA VETERINARIA BENARTEMI
- CLÍNICA VETERINARIA CAN
- CLÍNICA VETERINARIA CARVAJAL
- CLÍNICA VETERINARIA CRUCE DE ARINAGA
- CLINICA VETERINARIA EL PILAR- LAS CANTERAS
- CLÍNICA VETERINARIA ESCALERITAS
- CLÍNICA VETERINARIA JAIRA, S.L.
- CLÍNICA VETERINARIA LA HEREDAD
- CLINICA VETERINARIA LA MINILLA
- CLÍNICA VETERINARIA LOS GALGOS
- CLINICA VETERINARIA MONZON
- CLÍNICA VETERINARIA PACO
- CLÍNICA VETERINARIA POLÍGONO DE ARINAGA
- CLÍNICA VETERINARIA SAN JOSÉ

- CLÍNICA VETERINARIA SAN ISIDRO
- CLÍNICA VETERINARIA SIETE PALMAS
- CLÍNICA VETERINARIA TELEMASCOTA
- CLÍNICA VETERINARIA TUCÁN
- CLÍNICA VETERINARIA VEGUETA

Ruminants
- ANTONIO CASTELLANO VET. COLG. 260
- CENTRO VETERINARIO BELETÉN
- CLÍNICA VETERINARIA EL GUIRRE ALEJANDRO B. RODRÍGUEZ RIVERO-COL. Nº 407

Horses
- FRANCISCO J. DORESTE CABALLERO-VETERINARIO COL. Nº 134
- JESÚS FORGA MARTEL VETERINARIO COL. 289
- LUIGI DÍAZ-BERTRANA SÁNCHEZ-COL.Nº 306
- ALEXIS RUIZ RODRIGUEZ COL: 654

Pig Farm
- A.D.S. PORCINO DE GRAN CANARIA

Poultry
- ADS AVICULTURA GRAN CANARIA

Animal Production
- A.H.O.F. SOCIEDAD COOPERATIVA AGROPECUARIA
- COMPAÑÍA CANARIA DE PIENSOS, S.A.
- GRANJA DE LA FACULTAD DE VETERINARIA
- UNIDAD DE REPRODUCCIÓN Y OBSTETRICIA DE LA FAVE
- CRIACANARIAS DE GALDAR

Aquaculture
- ALEVINES Y DORADAS, S.A.

Food and Food Safety Companies
- ACEICA REFINERÍAL, S.L.
- AIR CPU S.L.
- CRITICAL POINT IBÉRICA, S.L.
- ELABORADOS FREIREMAR, S.A.
- EMBOTELLADORA DE CANARIAS, S.A.
- EUREST, S.A.
- J.C. DAVINIA CANARIAS, S.L.
- O.H.A.P.A.
- RESTAURANTE ESCUELA DE MELENARA
- SIALSA

Zoological and Wild Fauna Parks and Zoological Centres:
- ALBERGUE DE BAÑADEROS
- ASPRO PARK CANARIAS S.L. PALMITOS PARK
- CENTRO DE RECUPERACIÓN DE FAUNA SILVESTRE DE TAFIRA

Veterinarians
- JOAQÚIN FÁBREGAS LEAL-COL. Nº 557
- NATACHA SUAREZ RODRIGUÉZ, COL Nº 736
- ISMENE DE SANTIAGO POSADA- COL. Nº 787

SANTA CRUZ DE TENERIFE

Small Animals:
- HOSPITAL VETERINARIO EL ARCA DE NOÉ
- HOSPITAL VETERINARIO SAN ANTONIO
- HOSPITAL VETERINARIO SANTA CRUZ
- HOSPITAL VETERINARIO TENERIFE NORTE
- CENTRO VETERINARIO LOS SAUCES
- CLINICA VETERINARIA ANAGA
- CLINICA VETERINARIA ANIMALANDIA
- CLÍNICA VETERINARIA CORONA
- CLINICA VETERINARIA CRUZ DE PIEDRA
- CLINICA VETERINARIA DUGGI
- CLÍNICA VETERINARIA EL CALVARIO
- CLÍNICA VETERINARIA GUAZA
- CLÍNICA VETERINARIA LA GUANCHA
- CLINICA VETERINARIA LA OROTAVA
- CLÍNICA VETERINARIA LOS CUARTOS
- CLÍNICA VETERINARIA LYNX
- CLÍNICA VETERINARIA MR. DOG
- CLINICA VETERINARIA SABUESOS
- CLÍNICA VETERINARIA TACO, S.L.
- CLÍNICA VETERINARIA 3 DE MAYO
- CLÍNICA VETERINARIA VERODE
- CLÍNICA VETERINARIA VESAL, S.L.

Animal Production
- DON LEANDRO, S.L.
- GRANJA EXPERIMENTAL “FINCA EL PICO”

Ruminants
- GRANJA TEISOL, S.L

Horses
- HOSPITAL EQUINO DE TENERIFE, S.L.

Food and Food Safety Companies
- SÁNCHEZ BACALLADO, S.L.

Zoological and Wild Fauna Parks and Zoological Centres:
- C.R.F.S. DE LA TAHONILLA (CABILDO DE TENERIFE)
- LORO PARQUE FUNDACIÓN

Research Centres
- INSTITUTO CANARIO DE INVESTIGACIONES AGRARIAS

Veterinarians

- Mª ISABEL PASCUAL GOMEZ COL Nº 141
- FRANCISCO RODRÍGUEZ FRAGOSO COL. Nº 205
- MARIO GONZÁLEZ-COVIELLA ULRICH-VETERINARIO COL. Nº 263
- MAURO FERNÁNDEZ MARTÍN- VETERINARIO COL. Nº 302
- MIGUEL EVARISTO DE LA ROSA DELGADO COL. Nº 354
- JOSÉ ENRIQUE GARCÍA GARCÍA COL. Nº 368
- FELIPE TRUJULLO CAMEJO COL Nº 507

FUERTEVENTURA

Small Animals

- CLÍNICA VETERINARIA BICHOS SERVICIOS VETERINARIOS,S.L.
- CLÍNICA VETERINARIA FUERTEVENTURA

Zoological and Wild Fauna Parks and Zoological Centres:

- LA LAJITA OASIS PARK

LANZAROTE

Small animals:

- HOSPITAL VETERINARIO FANY
- CLINICA VETERINARIA TIAS
- CLÍNICA VETERINARIA TIMANFAYA

Zoological and Wild Fauna Parks and Zoological Centres:

- ASOCIACIÓN PROTECTORA “SARA”

LA PALMA

Small animals

- CLÍNICA VETERINARIA JORGE LUIS GONZÁLEZ RODRÍGUEZ
- CLINICA VETERINARIA TIJARAFE

Animal Production

- CENTRO DE TESTAJE CAPRINO

LA GOMERA

Small animals

- CENTROS VETERINARIOS GOMEROS, S.L.

EL HIERRO

Food and Food Safety Companies
- DIRECCIÓN DEL ÁREA DE SALUD DE EL HIERRO

MADRID

Small animals
- CENTRO VETERINARIO RAMON Y CAJAL
- CLINICA VETERINARIA GATOS

Zoological and Wild Fauna Parks and Zoological Centres:
- C.R.F.S. GREFA (MADRID)
- ZOOS IBÉRICOS S.A. ZOO-AQUARIUM

BARCELONA

Small animals
- CONSORCI VETERINARI S.L.

Horses
- CLÍNICA EQUINA A. ESTEBAN

Zoological and Wild Fauna Parks and Zoological Centres
- CENTRO DE RECUPERACIÓN DE FAUNA TORREFERRUSSA

CADIZ

Small animals
- CENTRO VETERINARIO CONIL

Zoological and Wild Fauna Parks and Zoological Centres:
- ANIMALS ANGESL E.V. (ONG)

GRANADA

Small animals
- CLINICA VETERINARIA ILIBERIS

HUELVA

Aquaculture

CULMASUR, S.A. (CULVITOS MARINOS DEL SUR, S.A.)

MURCIA

Small animals

- CLÍNICA VETERINARIA LEVANTE

BIZKAIA

Zoological and Wild Fauna Parks and Zoological Centres

- CENTRO DE RECUPERACIÓN DE FAUNA SILVESTRE DE GORLIZ

CANTABRIA

Horses

- HOSPITAL DE CABALLOS DE CANTABRIA

LUGO

Zoological and Wild Fauna Parks and Zoological Centres

- MARCELLÉ NATUREZA, S.L

Describe the general learning objectives underlying the veterinary curriculum and how this is ensured.

The Veterinary Faculty of the ULPGC, together with all the Veterinary Faculties in Spain participated in the so-called *Libro Blanco* on the Veterinary Degree; in this document the learning objectives of the curriculum were listed with the marks graded to competences. The degree of Veterinary studies has its own EU directive which shows the recognition of the degree and qualifications of Veterinary graduates which outlines that during the total period of their training a vet must have acquired :

a) sufficient knowledge of the sciences upon which veterinary activities are based;
b) sufficient knowledge of the structure and functions of healthy animals, their rearing, reproduction, general hygiene, as well as feeding, including technology applied in the production and conservation of the food they need;
c) sufficient knowledge of the behaviour and protection of animals;
d) sufficient knowledge of the causes, the nature, the development, the effects, the diagnosis and the treatment of animal diseases, both individually and as a group; and especially diseases transferable to humans;
e) sufficient knowledge of preventive medicine;
f) sufficient knowledge of hygiene and technology in obtaining, processing and putting into circulation animal food, or food derived from animals destined for human consumption;
g) sufficient knowledge of legal and administrative conditions, rules and regulations, relative to the previously cited areas;
h) a sufficient clinical and practical experience carried out under adequate supervision.

Specific Compentences of disciplinary and professional training

For the general characteristics that a graduate in veterinary studies in Spain legally possesses, the majority of competences are those in common with all professional graduates, although, in some cases, there should be a greater depth for some of them. As stated in a previous chapter, this could be carried out in the non-core part of the structure of the course. In practical effect, we have divided the competences into those which refer mainly to the acquisition of

knowledge, and those which require the development of handling ability and those which require the development of attitudes which in general can be defined as:

- **Disciplinary Competences** (to know): are those which make up the knowledge and comprehension of the theoretical knowledge which sustain the various disciplines involved in the training of a veterinary.
- **Professional Competences** (to know how to do): a collection of intellectual abilities and manual dexterity which a vet must possess, and must acquire during their training for them to be considered to be able to join the profession.
- **Academic Competences** (to know how to be): are those which make up the collection of attitudes and values which a veterinary should have, and the student should incorporate into their daily life as a part of the professional group they are going to join.

We understand that with this classification we can answer the need for a more integrated training, particularly in the definition of those aspects relative to 'to know how to', which would include for example, the issues relative to the practical application of knowledge and the resolution of problems, points in which a clear deficit exist according to employers. In other areas, within academic competences (of attitude) other issues are reflected that, at first glance, appear to be under-developed at university, for example the capacity for analysis and synthesis or information management. Together, the development of these competences should be the main aim of any new structure of veterinary studies, as delivering to the work market graduates who fulfil the expectations that society demands has to be the satisfactory consequence of our objectives.

The list of competences is not intended to be exhaustive nor exclusive, as excessive detail would impede a precise evaluation, but those that, in our opinion, bring together the minimum requirements that form an essential part of any training programme for veterinarians. Therefore, the lists as follows constitute the basic nucleus of competences common to all profiles. Nevertheless, in those cases that are pertinent, it is noted in brackets the profile or profiles which would require greater depth. According to the *Libro Blanco* on Veterinary studies, graduates should reach the following competences:

General (From the Tüning project)

G1. Capacity for analysis and synthesis.
G2. Capacity to apply knowledge in practise.
G3. To plan and make use of time.
G4. General basic knowledge of the area of work.
G5. Basic knowledge of the profession.
G6. Written and or al communication in the language.
G7. Knowledge of a second language.
G8. Basic handling ability.
G9. Research techniques.
G10. Capacity for learning.
G11. Information management techniques.
G12. Capacity for criticism and self-criticism.
G13. Capacity to adapt to new situations.
G14. Capacity to generate new ideas.
G15. Problem solving.
G16. Taking decisions.
G17. Working in a team.
G18. Capacity to build relations.
G19. Leadership.
G20. Capacity to work in an interdisciplinary team.
G21. Capacity to communicate with non-experts in the material.
G22. Appreciation of diversity and multiculturality.
G23. Ability to work in an international context.
G24. Knowledge of cultures and customs of other countries
G25. Ability to work by oneself.
G26. Project Design and management.
G27. Initiative and business spirit.
G28. Ethical stance.
G29. Concern for quality.
G30. Desire for improvement

And Specifics:

A. Knowledge (Disciplines = to know)

A1. Generic knowledge of animals, their behaviour, and notions of their identification.
A2. Structure and function of healthy animals.
A3. Rearing, caring, handling and well being of animals.
A4. Basics of chemical and molecular physics of the principal processes which take place in an animal's organism.
A5. Basic and applied principles of the immune response.
A6. To know the basic fundamentals of different biological agents of veterinary interest.
A7. Knowledge of the alterations of structure and function of the animal's organism.

A8. Knowledge and diagnosis of different animal diseases, individual and collective, their preventative measures with special emphasis on zoonoses and diseases of obligatory declaration.
A9. General basics of medical-surgical treatment.
A10. Knowledge of the basics of the functioning and optimisation of the reproductive system of animals and its repercussions for the environment.
A11. The principles of food science and technology. Quality control of produced food and Food security.
A12. To know the organisational, economic and management aspects of all fields of the veterinary profession.
A13. To know the rules and laws of the veterinary world and regulations about animals and the commercial use.
A14. To know the rights and responsibilities of a Veterinary, making special reference to ethical principles.

B. Skills and Abilities (Professional = to know how to do)

B1. Carry out the history and clinical exploration of animals.
B2. Collect and send all types of samples with their corresponding report.
B3. Carry out basic analytical techniques and interpret the clinical, biological and chemical results.
B4. Diagnose the most common diseases by using different general techniques and instruments, including necropsy.
B5. Identify, control and eradicate animal diseases, with special attention to zoonoses and diseases of obligatory declaration.
B6. Attend to emergencies, and carry out veterinary first aid.
B7. Carry out the most common medical-surgical treatments of animals
B8. Apply basic care which guarantees the correct functioning of the reproductive cycle and solves obstetric problems.
B9. Assess and carry out epidemiological studies and therapeutic and preventative programmes according to the norms of animal care, animal health and public health.
B10. Evaluate and interpret the productive and health parameters of an animal collective, considering economic and welfare aspects.
B11. Manage protocols and concrete technologies destined to modify and improve the different systems of animal production.
B12. Carry out an inspection of the animal ante and post mortem and of food destined for human consumption.
B13. Carry out sanitary control of the different types of businesses and restaurant and food establishments. Implantation and supervision of quality management systems.
B14. Carry out risk analysis, including environmental and biosecurity, and its evaluation and management.
B15. Apply food technology to the production of food for human consumption.

B16. Technical and economic assessment and management of companies in the veterinary area in terms of sustainability.

C. Attitudes and Values (Academic = to know how to be)

C1. Analyse, synthesise, resolve problems, and take decisions in the professional environment of a veterinary
C2. Work in a team, uni or multidisciplinary, and show respect, evaluation and sensitivity towards the work of others.
C3. Maintain ethical behaviour towards the profession and to society when exercising their responsibilities.
C4. Relate information obtained during their professional work in a fluent way, spoken and written, to other colleagues, to the authorities and to society in general.
C5. Write and present professional reports, whilst maintaining the necessary confidentiality.
C6. Look for and process information related veterinary work.
C7. Know and apply scientific methods in professional practice including evidence based medicine.
C8. Know how to obtain professional assessment and help.
C9. Demonstrate a desire to know how to use basic computer tools.
C10. Have basic knowledge of a second language, especially in technical aspects related to Veterinary Sciences.
C11. Be conscious of the need to maintain up to date knowledge, skills and attitudes of professional competences through a process of continuous training.

To be able to reach these learning objectives each subject in the field must, in turn, describe in the teaching project or guide which should be written each year and which should be approved by the Teaching Affairs Committee, the learning objectives of the subject, and relate each one of these objectives to the general and specific competences of the degree: to this end in the teaching guides the codes for these competences can be found, as they are shown in this document.

Each subject develops an evaluation system which ends with the verification that the learning objectives which were proposed have been attained. Therefore each subject must make sure that the objectives are reached and to ensure this, an evaluation system has been devised in which evaluation criteria are defined and finally a classification system is developed. All this information must be included in the teaching projects of the subjects.

Describe how the Faculty collects data required to ensure students are equipped with these Day-one skills (evidence of learning).

In writing these subject teaching projects the day one competences have to be considered. Therefore, when students pass different subjects this means that they have reached the proposed learning objectives.

The skills listed as day one competences: ***General professional skills and attributes***, ***Underpinning knowledge and understanding*** *and* ***Practically-based veterinary competences*** (Annex IV new SOP), are included in the subject learning objectives of the study programme.

At the time of writing this self-evaluation document the Veterinary Faculty had designed an Quality Guarantee System, which is being evaluated by the Spanish Agency for Quality Assurance and Accreditation (ANECA) to which the system has to be incorporated to guarantee the acquisition of day one competences by the students.

5.1.2. THE TEACHING ENVIRONMENT

Describe the available staff development facilities, particularly in relation to teaching skills.

Describe the available systems for reward of teaching excellence (e.g., accelerated promotion, prizes, etc).

Describe other measures taken to improve the quality of teaching and of learning opportunities.

Prize for Teaching.

Until the academic year 2006-2007, and based on results of questionnaires about student satisfaction, the ULPGC awarded a prize for teaching. This prize has not been awarded for the last two years.

Remunerative Complements.

The interaction of the teaching and research career model which is established with a system of remunerative complements laid out in the Canarian Government Decree 140/2002, of 7th October, on the contracted teachers and researchers conditions and on the remunerative complements of Canarian University teachers intends to lead to a re-evaluation of the teaching role of University staff according to the learning needs that the development of Canarian society demands.

The Canarian Universities Social Councils, as proposed by their respective Government Boards can agree to apply singular and individual remunerative complements to teaching and research staff, within the guidelines and limits set by the decree.

The allocation of the complements requires the previous positive evaluation of the merits outlined in the Canarian Agency for University Quality Assurance (ACECAU), in accordance with the protocols of evaluation passed to this effect by the Agency and based on objective criteria.

There are three types of complements (teaching, research and institutional services) with three separate channels of remuneration, one for each one. The supposed merits to obtain remunerative complements are justified by the applicants in terms set out in the protocol of evaluation. Furthermore, the committee of experts in charge of the evaluation can request applicants to make any clarification which they consider necessary in relation to the supposed merits. The ACECAU establishes audits to check the facts presented by applicants.

For the allocation of a complement for teaching merit, the opinion of students is taken into consideration through questionnaires of satisfaction and a self-evaluation record presented by the applicants. The questionnaires of satisfaction are carried out by the ACECAU, in accordance with the approved models in the corresponding evaluation protocols, which includes the objective criteria of the application. The points obtained in the questionnaire must be above a minimum number fixed in the evaluation protocol, so applicants which do not score above this mark cannot obtain remuneration through any of the channels of this complement.

The complement for teaching merit has three progressive steps whose allocation depends upon the marks obtained according to the auto-evaluation record. The necessary marks to obtain one of the channels are fixed in the evaluation protocol, which outlines the minimum required to pass the first stage. The quantity of remuneration varies between €1,200 and €1,600 per stage. The evaluation of the complement for teaching merit is carried out every four years.

Five Year Teaching Period

Every five years tenured teachers have the right to a recognition of the teaching they have done. The concession of a five year bonus amounts to €123.81 monthly for Assistant Professors and €152.86 for Professors (figures for 2008) which is incorporated into the monthly salary for life.

Teacher Training Programme

Through the Vice-Rector of Quality and Educational Innovation training activities are programmed for the teaching staff of the University.

VIDI Research Activity Development Programme

Through the Vice-Rector of Research, Development and Innovation (VIDI) research staff activities are financed, in particular attendance at congresses in which research projects are presented. This aid helps promote attendance of teaching staff at congresses which in turn helps improve the quality of the teaching staff.

Grants to carry out study visits in other centres

Due to the island nature of the Canaries and its geographical location on the outer rim of the European Union, every year the Education, Culture and Sport Department of the Canarian Government gives out a grant to make study visits in other centres. This grant's aim is to make it easier for teaching staff to leave, especially abroad, to carry out studies in a specialisation or research projects. This grant's final objective is to support the investment in human resources in the field of research and investigation, science and technology, and technological transfer. This investment is undoubtedly of great benefit to teaching staff once they return and are re-incorporated into their post here. The maximum time allowed for this visit is nine months a year.

Promotion of Teaching Staff Mobility

The ULPGC participates in different national and international mobility programmes such as Erasmus, SICUE/Seneca and others such as the Santander-ULPGC Scholarships (which helps move teachers to Latin America).

5.1.3 THE EXAMINATION SYSTEM

Describe the examination system of the Faculty, particularly in relation to:

- Is there a central examination policy for the Faculty as a whole? If 'yes', by whom is it decided?
- Are there special periods (without teaching) during the year for examinations?
- What form(s) of examination are used (written papers, multiple-choice questions, oral, practical, clinical examination, continuous assessment, etc.)?
- Is use made of external examiners?
- How many retakes of an examination are allowed?
- Do students have to pass the examination within a certain time?
- Do students have to pass an examination before they can start other courses?

The examination system is described in the Regulations of Teaching and Learning Evaluation. In these regulations, the criteria for teaching are outlined according to the planning carried out by the centres and departments (articles19, 24, 96, 99, 106 and 108 of the Statutes of the ULPGC, and the bases for the evaluation of students according to the teaching project of the subject are fixed.

This also fulfils the subsection 190.d) of the Statutes of the ULPGC, about the rights of students to know the full study plan and the programme of each subject before matriculating; and the previous establishment of criteria for carrying out and correcting the evaluation tests in each subject before the tests take place.
The evaluation of the students' academic performance is done objectively, based on principles of co-ordination which should indicate the high general level of teaching quality and of student performance, according to the principles established in article 135 of the Statutes.

Students have the right to sit an examination six times, and can be granted two more grace sittings per subject, provided that there is a justified cause or illness of more than four months in length which has prevented the student from meeting their obligations and provided that this has been verified. This does not apply to free-choice subjects as these examination sittings are limited to those which occur annually.

Students have the right to two examination sittings per subject in each academic year according to the article 190.f) of the Statutes of the ULPGC.

There are three types of examination sittings, whose timetable is approved each year by the ULPGC Government Board:

a) **Ordinary Sitting**: takes place in the month of February (the subjects of the first four-month term) and in the months of June or July (the subjects of the second four-month term and the annuals).
b) **Extraordinary Sitting**: takes place in the month of September. In the case of the subjects of the first four-month term students can ask for the extraordinary sitting to take place in June or July.
c) **Special Sitting**: takes place in the month of December Students can take Special sitting examinations to a maximum of 27 credits or three subjects provided that they fulfil the following conditions:

- That the students were previously matriculated in the subjects or credits concerned.
- That the subjects or credits are the final ones pending to finish their studies.

Not attending a special sitting examination will be taken as a renunciation so students can take the other two examination sittings in the year, ordinary and extraordinary without further action. If the student does not pass the special sitting examination then they are automatically allocated an ordinary sitting and if they do not take that, they have the right to an extraordinary sitting. Students who would like to take advantage of the extraordinary sitting are examined according to the teaching project of the subject of the previous year. Holding special sitting examinations never involves suspending classes.

In the last two sittings students are examined in front of a panel made up of three members and three standbys. Of the three members, at least two should be teachers in the corresponding area of knowledge or an area of knowledge which is considered by the scientific community to be closely related.

The panels are named by the Dean, following the recommendation of the Head of the corresponding Department. In the case of the department not making any recommendation, the Dean will choose the members of the tribunal panel.

Evaluation of Learning

Every student matriculated in a subject has the responsibility and the right to take all tests and examinations stipulated in the teaching project of that subject and to be evaluated and classified objectively by the teachers according to the provisions set out in the same teaching project.

The evaluation systems outlined in the teaching project of each subject should be based on one or more of the following activities:

a) Participation in theoretical and practical classes, seminars and other complementary activities.
b) Carry out practicals.
c) Presented work.
d) Partial examinations taken.
e) Final examinations
f) Anything else mentioned in the teaching project.

The classification and evaluation by annual subject examinations system includes holding at least one partial examination. In the case of four-month term subjects, the sitting of partial examinations is included in the teaching project of the subject. The date and time of holding the examination is agreed between the teacher and the students and cannot coincide with the teaching of other subjects on the same course.

Passing any test referred to in parts (b), (c), (d) y (e) and relative to part of the programme of the subject, assumes the elimination of the material object of the examination or test at least until the ordinary sitting. Extending this validity to the extraordinary or special sitting should figure in the teaching project of the subject. In any case, for those students who take the examination, the practical tests that have been passed will be counted as valid provided that the teaching project is not altered.

Those students who have not attended the practical classes outlined in the teaching project are not eligible to take part in the partial examinations, without breaking the regulations established in article 190.k) of the Statutes.
The subject teacher will make sure that students with physical disabilities can take tests and examinations in conditions according to their disability. When it is considered necessary the teacher can

ask the student to present the relevant medical certificates. For the application of this article, any disability should be communicated to the centre and to the teacher by the student at the beginning of the academic year.

The formal declaration of the examination is handed in on a legible photocopy of the original document. The text should be clear and understandable. It should indicate the marks awarded for each different section without affecting an overall evaluation of the exercise. It should also indicate the maximum time allowed to carry out the test. The answers of the students should be clear, legible, well organised and ordered according to the numbering of the questions of the examination. At the moment of taking the exam, the teacher must inform the students of the timetable for the revision of the results.

An examination cannot last more than four hours. In exceptional circumstances, if an exam lasts longer it should be taken in more than one part, with a maximum of two sessions on the same day. Between the two sessions there must be a break of no less than one hour, except for those exams whose nature does not require the continual presence of the student in the examination room.

In the case of a clash of date and time between to final exams of different subjects, the student has the right to ask the teacher of the higher year course to allow them to sit the examination on a different day, with at least 24 hours of time difference to the date of the other examination. The student must show a certificate which proves their attendance at the lower year course.

The teacher has the right to request a student's identification at any time during the test or examination. The students must identify themselves by showing their national identity card, their passport, their driver's licence, ULPGC card or other approved form of identification allowed by law.

Students have the right to be declared exempt from studies and from the calendar of evaluation tests (article 190.k of the Statutes of the ULPGC) when there are objective justified circumstances, such as serious illness or a similar cause which allows them to exercise this right. Justified circumstances are judged to be:

a. The attendance of student representatives at meetings and commissions of the Social Council, the Central Electoral Board, meetings and commissions of the Faculty Board, Department Councils, assembly meetings of representatives and the student council of ULPGC, attendance at congresses of student representatives at regional and national level. Attendance must

be certified by the secretary of the relevant organisation. Student representatives have, in this way, the right to not have their lack of attendance counted when the absence ids due to the functions previously described and in the case of a clash with an objective test are allowed to repeat the test at another time, before taking the following test, and in the case of it being the final test, the repetition should be before the final examination.

b. The justified attendance of elite sportspeople at the Olympic games, world championships, European championships, National championships Canary Island championships and qualifying tournaments for the previously listed. In the last two cases the student must present the justification of attendance request to the Vice-Rector of Academic Affairs at least 15 days previously. Applications and absences must be accompanied by a certificate issued by the corresponding federation.

Cheating on any test or exercise required by the evaluation system of any subject merits an automatic fail in that examination, independent of any disciplinary process against the offending student which could occur as a result.

After the finalisation of the test or examination, students have the right to ask the teacher for documentary justification that they have taken the test/exam.

Students have the right to ask for the results of all tests, work or examinations that they have done, in accordance with the previously established evaluation system.

After taking each examination, the students receive from the teacher of the subject the necessary information, the results and methods of answering the questions and problems posed with the aim of allowing the students to take maximum advantage of the tests taken.

The literal and numerical classifications as outlined in the acts are as follows:

- P (Absent)
- S (Failed) less than 5 marks.
- A (Passed) 5 or more marks, less than 7.
- N (Good) 7 or more marks, less than 9.
- E (Excellent) 9 or more marks
- M.H. (Highest Honours), which can be obtained by 5% of the students matriculated in a subject, who had previously been classified with an Excellent (10), and who have stood out from the rest for their exceptional quality.

The University must devise a new evaluation system which incorporates the directives generated by the ESHE.

Teachers must keep the examinations or tests under their responsibility, as outlined in article 14 for a period of eight months counting from the day of the exam. If the examinations were oral, students or the teacher can request in written form within three working days before the exam that the exam be recorded by voice recording equipment. This recording must also be kept for a period of eight months.

The work and practical records, once they have been classified, are returned to the student provided they have been requested in written form. It is assumed that students have given up the right to have their work or records returned to them if they have not been requested to the teacher within two months of the publication of the results. Their full or partial reproduction or use for any other purpose must receive the explicit authorisation of the author or authors.

The results of the tests, examinations or work must be published within 15 working days of the examination date unless according to the school calendar they should be published before. The results of the examinations must be available in the centre where the subject is taught for a period of no less than five working days. The centre must allow and guarantee access to consult the results.

Together with the results of the examinations, the teachers must make public the time, place and date of the revision and checking of marks, with a minimum of two sessions which cannot be on the same day. The revisions must take place within ten working days of the date of publication of the results. During the revision, students can ask for information about the classification obtained without the need to have made any previous request.

The results of the final examinations can be appealed by students through the following process:

a) The student makes a written appeal to the Dean within a maximum of ten working days counted from the end of the revision of the examinations.
b) The Dean, once they have requested from the teacher a justification of the mark, names, after a previous proposal of the Head of the Department, a tribunal consisting of three members, at least two of which should be teachers in the corresponding area of knowledge, and in such case the third from an area of knowledge considered by the scientific community to be closely related. In the case of the department making no previous proposal, the Dean will appoint the members of the classification

panel. Teachers who have taken part in the correction of the final examination whose grade is being questioned cannot form a part of this tribunal.

c) The panel can, if they consider it necessary, increase the grade obtained by the student or order a new examination, respecting in its function the criteria of the teaching project of the subject. In any case, the panel will offer a considered resolution about their decision. In this final respect, the President of the tribunal must confirm the new classification by means of diligence in the acts, which is signed by all the members of the tribunal.

d) The resolution given by the tribunal is given to the Dean, and to all interested parties. The Head of the Department will receive prompt information of everything that has taken place.

e) An appeal against the resolution reached can be made to the Rector within one month counting from the date of the notification of the decision. The decision of the Rector is the end of the administrative process of appeal.

The acts are available to the teachers to be filled in one month before the deadline for them to be handed in. The acts with the results of the final examinations must be handed in and signed in the administration offices of the buildings within the timetables established in the academic calendar annually approved by the ULPGC Government Board.

The results which appear in the acts can be modified within the dates as follows:

a) Acts of the Ordinary and Special Sittings: 30th September.
b) Acts of the Extraordinary Sitting: 31st October.

The modifications of the acts allow for the following diligences, which must be attached to the original act:

a) Administrative diligence of the act: when the act must be modified for administrative reasons. It is signed by the Managing Director of the Faculty in the presence of the Secretary of the Faculty.

b) Academic diligence of the act: when the act must be modified in relation to the results. It must be signed by the person responsible for the subject, in the presence of the secretary of the centre.

c) Diligence of the tribunal: when the act must be modified by a decision of the revision tribunal. It is signed by all the members of the revision tribunal, in the presence of the secretary of the centre.

Once the previously established places have been finalised, modifications can only take place in the acts previous to the resolution of the Vice-Rector of Students, according to the procedure established to this effect. The original act of resolution of the Vice-Rector of Students is attached to the corresponding act.

According to the Regulations of Academic Planning, approved by the ULPGC Government Board on 16/02/2004, in article 31, the proposed examinations have to take place in a period of time established in the academic calendar for this purpose, and must contain for each subject the day and hour of the test, and the names of at least two teachers, named by the department, assigned to the test. In article 32, sit is established that the dates of the examinations can only by modified by justified causes and only up to one month before the initially established date. In any case, the modifications can only cause a delay (and never an advance) of the start dates and must be published on the notice boards. The examination calendar is approved by the Teaching Affairs Committee before the 15th March of the year of the start of the course.

In the academic calendar which is annually approved by the ULPGC, periods are reserved in which no other type of activity can be programmed apart from examinations, except in the Special sitting in December.

The examination format depends on what is being evaluated, and there are no common regulations, as each subject determines their own evaluation procedure, the criteria of evaluation, and the classification system. Among the procedures we should highlight the written examination in the form of questions to develop, short questions, test type examinations, and oral examinations, tutored work and presentations, etc.

There is no time limit for passing examinations, the number of matriculations in the same subject is also unlimited, although the number of examination sittings is limited to six. There are also no restrictions between courses to enter or to be able to matriculate.

5.1.4 EVALUATION OF TEACHING AND LEARNING

Describe the method(s) to assess the quality of teaching and learning used in the Faculty. Indicate whether the evaluation is a Faculty procedure, or one set up by individual departments, by students or by individuals. Indicate the use of external evaluators.

Describe the role of students in the evaluation of teaching and teachers.

Describe the follow-up given to the evaluation.

The ULPGC uses a system of satisfaction questionnaires for its students. The system allows the teaching staff to know first hand in an individual way the evaluation that their students make on their teaching activities. The objective of this information is to serve as a guide for teachers to know the perception their students have of their teaching activities.

The questionnaire collects the evaluations of the students and they have to award marks for each phrase from 1 (totally disagree), 2 (slightly disagree), 3 (agree), 4 (quite agree) y 5 (totally agree). The results of the **Veterinary Faculty** for the **academic year 2006-2007** were:

1	2	3	4	5
Totally Disagree	Slighty Agree	Agree	Very much Agree	Totally Agree

Results of the Questionnaire by Item

Questions		% According to answers							
		1	2	3	4	5	N	Avera-ge	Sx
1.	I consider that the teacher knows the subject matter very well.	2.3	2.9	16.3	31.7	46.8	1902	4.18	1
2.	The teacher explains things clearly	4.8	10.6	23.7	31.5	29.4	1901	3.70	1.1
3.	The teacher uses adequate resources to explain the subject matter.	3.2	8.4	26.9	34.9	26.6	1892	3.73	1
4.	Taking into consideration the conditions in which this subject is taught (number of students, timetables, methods, etc.) I am satisfied with the teaching performance of the teacher.	5.8	9.9	25.3	33.3	25.7	1900	3.63	1.1
5.	The teaching method of the teacher helps to understand the subject.	6.2	11.8	27.5	30.3	24.2	1899	3.54	1.2
6.	The teacher answers students questions accurately	4.3	7.7	27.2	32.2	28.6	1898	3.73	1.1
7.	The teacher has succeeded in making this subject interesting for me.	10.9	13	26.4	28.5	21.2	1901	3.36	1.3
8.	I would like to study another subject with this teacher.	15.5	12.1	25.2	25.8	21.4	1895	3.25	1.3
9.	The teacher has teaching ability.	5.1	10.7	26	30.9	27.3	1880	3.64	1.1
10.	As students we know from the beginning of the course the evaluation criteria for the subject	3.1	4.8	22.9	30.4	38.8	1835	3.97	1
11.	The teacher applies the evaluation criteria outlined in the programme of material.	3.2	4.3	25.1	32.6	34.8	1479	3.91	1
12.	The evaluations match what has been explained in class	3.7	6.3	25.3	31.9	32.8	1365	3.83	1.1
13.	The teacher has a receptive attitude to our questions and suggestions.	3.8	6.6	22.7	31.4	35.5	1871	3.88	1.1
14.	The teacher respects the students.	4	4.9	18.9	28.1	44.1	1897	4.03	1.1
15.	The students are informed when the teacher cannot attend class.	5.9	5.3	22.8	27.8	38.2	1656	3.87	1.2
16.	The teacher is punctual	5.4	6.3	20.4	27.9	40	1883	3.90	1.2
17.	The teacher presented the programme of the subject at the beginning of the course	2.8	4.3	21.2	28.6	43.1	1763	4.05	1

Questions		% According to answers							
		1	2	3	4	5	N	Avera-ge	Sx
18.	The teacher regularly fulfils his tutorial timetable	5	4.5	25.5	31.5	33.5	1314	3.83	1.1
19.	The teacher attends class regu-larly.	2.5	2.4	15.9	27.3	51.9	1860	4.23	1
20.	The teacher of this subject is a good teacher	6.4	7.3	21.5	29.6	35.2	1840	3.80	1.2

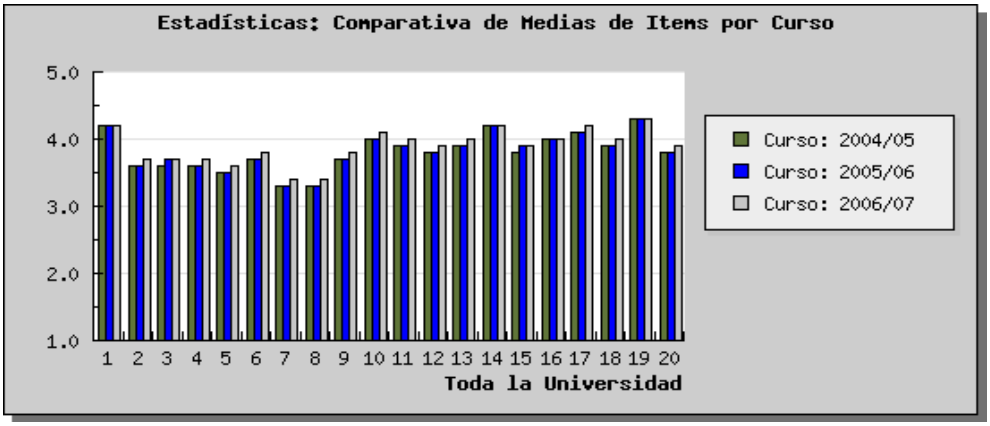
Note:
N: Numbers of questionnaires
Sx: Dispersion of answers (Level of unanimity)

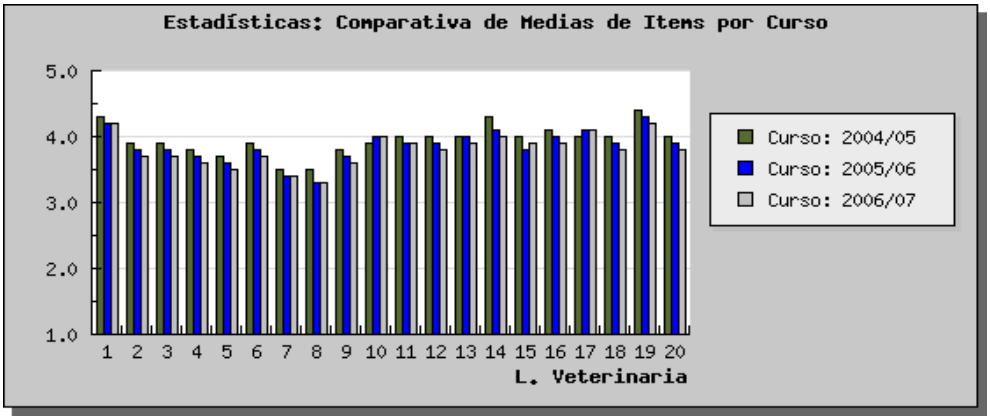
The 20 items are grouped into 6 sections, and a global evaluation is shown in the following table:

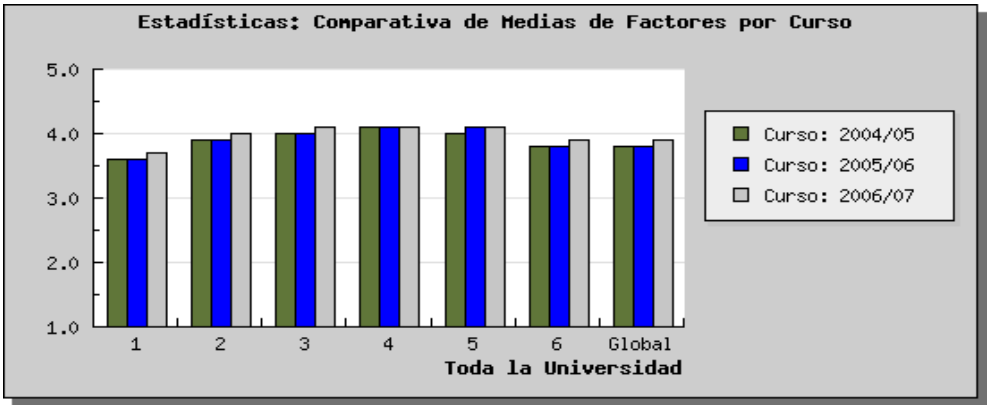
Results of the Questionnaires by Factors

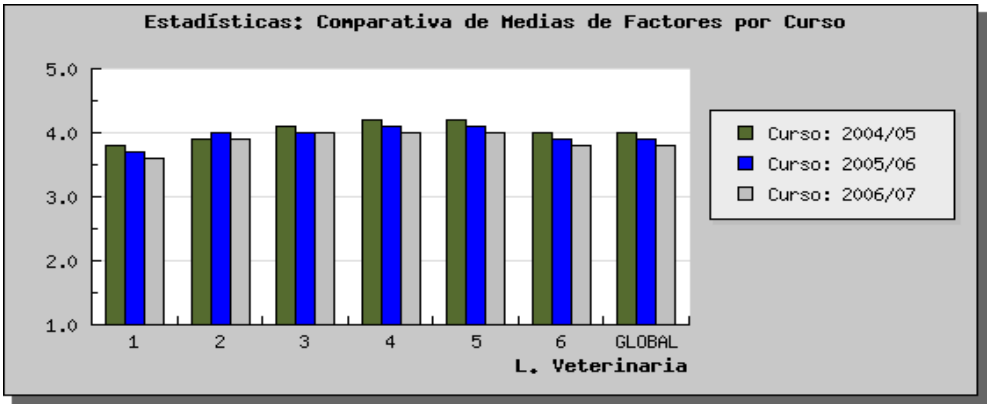
Factors	N	Average	Sx
Teaching abilitiy (items 1 to 9)	1913	3.64	1
Evaluation Style (items 10 to 12)	1851	3.91	1
Attitude towards Students (items 13 to 15 & item 17)	1913	3.96	0.9
Timetable punctuality (item 16, item 18, item 19)	1908	4.02	1
Teaching Dedication (item 15, items 17 to 19)	1907	4.04	0.9
Teaching Merits (items 1 to 4, item 10 & item 13)	1913	3.84	0.9
Global Evaluation (items 1 to 20)	1914	3.79	0.9

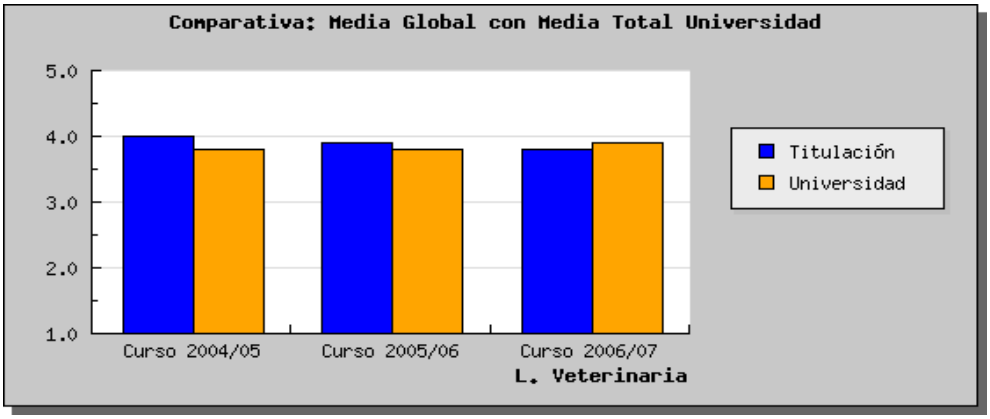
Note:
N: Number of questionnaires
Sx: Dispersion of answers (level of unanimity)




Estadísticas: Comparativa de Medias de Items por Curso
5.0
4.0
3.0
2.0
1.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
L. Veterinaria
Curso: 2004/05
Curso: 2005/06
Curso: 2006/07


Estadísticas: Comparativa de Medias de Factores por Curso
5.0
4.0
3.0
2.0
1.0
1 2 3 4 5 6 Global
Toda la Universidad
Curso: 2004/05
Curso: 2005/06
Curso: 2006/07


Estadísticas: Comparativa de Medias de Factores por Curso
5.0
4.0
3.0
2.0
1.0
1 2 3 4 5 6 GLOBAL
L. Veterinaria
Curso: 2004/05
Curso: 2005/06
Curso: 2006/07



We should also mention the **Canarian Agency for University Quality Assurance (ACECAU)**, which is an autonomous administrative organisation which is part of the Department of Education of the Canarian Government with competences in educational matters, which will fulfil the functions set out in the Organic Law of Universities 6/2001, of 21 December, such as the contract-programmes signed between the Government and the Canarian Universities. Establishing in the Canaries an Quality Agency which is directed, among other objectives, to the evaluation of our university system is one of the highest priorities which the working development of the Organic Law of Universities must cover, given the important role that it is called to perform in the new legal procedure set out by the law.

The objective of the Agency is a trustworthy, systematic and independent evaluation of the fundamental components of the university system (centres, degrees, teaching, research, staff, management, etc.) and of the impact of the policies carried out by the Universities and Administration in order to constantly improve the quality of services offered. The Agency is a separate legal body and acts in full independence of the Administration and of the Universities.

The principal activities which the ACECAU will undertake related to teaching are:

a. Evaluation for the allocation of remunerative complements:

The Organic Law of Universities 6/2001, of 21st December, outlines the possibility of the evaluation of merits previous to the allocation of remunerative complements by the external evaluation bodies that the Autonomous Community laws determine.

The Decree 103/2002, of 26th June, article 3.b), by which the ACECAU is regulated, allows the Agency to evaluate merit to establish additional remuneration of the staff of the Canarian public universities.

The Decree 140/2002, of 7th October, in article 9.2, on the regulations of contracted teaching and research staff, and on remunerative complements of the teachers at Canarian universities outlines that the allocation of remunerative complements of teaching and research staff requires a previous positive evaluation of merits from the ACECAU, in accordance with the evaluation protocol approved by the Agency using objective criteria.

The ACECAU invites requests for evaluation to allocate remunerative complements by the Canarian universities to university teachers.

b. Accreditation for contracting by the Canarian universities.

The evaluation required for the contracting of staff by Canarian public universities in the terms outlined in articles 50, 51 and 52 of the Organic Law of Universities and in the Autonomous Decree 140/2002, of 7th October, must be carried out by the ACECAU in accordance with the evaluation protocol approved by the Rector Board, fulfilling article 11 of the decree 103/2002, of 26th July. The ACECAU is open throughout the year to receive requests of accreditation previous to the contracting of university staff by Canarian universities. Throughout the year, various evaluation sessions in function of the requests received are held.

Currently a teaching quality evaluation programme is being developed at national level for all universities. This is called the Teaching Performance Programme (*Programa Docentia*). The ULPGC is currently developing a teaching performance programme for our university and it will have to be verified and approved by the Canarian Agency for University Quality Assurance (ACECAU).

5.1.5 STUDENT WELFARE

Describe any measures taken to protect students from zoonoses (e.g. rabies) and physical hazards.

Describe the facilities (not related to the teaching programme) which the Faculty provides for students.

Describe the guidance offered by the Faculty (or its parent institution) for students with problems (social problems, study problems) as well as for future career development or job selection.

The Faculty has a vaccination programme against major diseases. This programme is administered by the health authorities of the Health Department of the Canarian Government and applies not just to veterinary students, but to the whole university community.

The University has a Risk Prevention Service which makes risk assessments and provides solutions to avoid them. This service does not depend of the Faculty, but is a Centralised Service of the ULPGC.

The VTH has its own Work Risk Prevention System, which although it is directed towards hospital staff, identifies risks and proposes preventative measures, which in turn benefit students. This system is published on the Faculty website.

The service to students is centralised in the University of Las Palmas de Gran Canaria and includes the following:

1. Access Office. In charge of writing the student guide. This guide complies all the information necessary for access to the ULPGC, which includes the admission examinations for University .

2. Student Services Office. In charge of the orientation programme and which offers information about the various degrees offered by the ULPGC and organised through informative chats in secondary school centres during open days, in which they invite the local community to get to know the university.

3. Psychosocial Help Office. In charge of, on the one hand, of **Social Action** through the voluntary university programme, help to disabled students and a programme of alternative housing, which is complemented by a training programme, called Solidarity Days (*Jornadas Solidarias*). On the other hand, it has a **psychosocial help** service through the gifted students programme. This is a programme of university tutoring by teachers of the University of Las Palmas de Gran Canaria for gifted students at ESO and Bachillerato level of secondary school in Gran Canaria, Lanzarote and Fuerteventura which intends to provide an extracurricular enrichment to the students through tutoring by university mentors. There is also a student orientation programme. With this programme, help is offered to students who at some time need advice about strategies about how to study successfully, how to overcome stressful situations, etc. With regard to helping disabled students, a programme of recommendations for various disabilities is offered (visual, physical or audio impaired), a sign language interpreter, a guide for improving communication with students with hearing difficulties, as well as a service for disabled students with regard to housing, transportation, parking and canteens/cafeterias.

4. Training Orientation Office. This works basically as a Work Orientation Service, as it intends to be a support to university students who would like to join the workplace. It consists of a number of professionals specialised in employment, who guide students to achieve their work objectives. They analyse the professional interests and personal qualities, offering specific information about actions on the work plan most suitable to their capabilities as well as providing other information about activities of interest. This office also administers the training grants sponsored by BBVA bank.

5. University Extension Office and Co-ordination. This service is in charge of:

> **a. Programme of Canarian Studies** With this programme, the ULPGC opens its university classrooms to those people who, fulfilling minimum academic prerequisites would like to know the Canary Islands and Canarian people better, as well as the Canarian contribution to humanity. This is knowledge which doubtless helps us to build a better future. These are the basic objectives of this new programme of the ULPGC to understand the different aspects which make up the plurality of life in the islands; to know the different elements and factors

which occur in nature, the economy, society and culture of the Canary Islands, and to evaluate the reach of the Canarian contribution to science and technology and its application to the development of the archipelago.

b. University Extension Courses are a service to the university community and to the general public, the product of an agreement between the University of Las Palmas de Gran Canaria with society in general. These activities are extracurricular and are defined by their scientific quality and their social interest. They are designed to meet the following objectives: To complement the curricular education of the students, to update the information of working professionals, to spread information about scientific advances between university students and the rest of society, and to reflect, debate, and project the cultural, economic and social development of the Canaries.

c. The "Peritia et Doctrina" programme is the contribution of our University to social help with a collective based in university groups which has made a meeting place for those who have experience (pericia) to those who are learning (doctrina). More precisely, the success of this programme has encouraged the ULPGC to move to the next stage in terms of offering open training programmes, with no age or academic restrictions which will serve to bring the university to those who would like to take advantage of its services for their integral training.

6. University Residences Office. The ULPGC has at its disposition an apartment complex in and two university residences in the Tafira campus and in Las Palmas city. These residences offer students teachers and other members of the University community accommodation during the academic year or need to carry out short visits at our campus. More information can be found at the website: http://www.fulp.ulpgc.es/index.php?q=estudiantes_sau

With regard to insurance, the veterinary students are strongly advised when they first matriculate that they take out the **Cum Laude Insurance** (*Seguro Cum Laude***)**, which is specifically designed for students who carry out off-campus activities. It is an insurance policy based on an agreement between the University and the ACE EUROPEAN GROUP Ltd. company, one of the world leaders in the area of insurance, in which for €10.52 a year a student can be insured on their course for up to €15,025.30.

The accidental coverage includes:

- Loss of class for 20 consecutive days, as a result of an accident: up to €1,202.02 as a help towards private classes.
- Loss of matriculation: the refund of cost if by accident class cannot be attended during two consecutive months or the accident occurs during the 15 days prior to the sitting of the final examination, up to a maximum of €1,803.04.
- Health assistance by accident: Unlimited in approved centres up to 365 days. In the free selection of doctors up to €1,202.02.
- Permanent total invalidity by accident: payment of €15,025.30.
- Permanent partial invalidity by accident: by case up to €15,025.30.
- Death by Accident: a payment of €9,015.18.
- Family death by public or private transport of mother and/or father: a payment of €6,010.12 and €9,015.18 if both parents die in the same accident.

If the student is out of Spain for a period of less than 90 days:

- Coverage for Accident and/or Illness:
- Medical assistance for illness up to €1,202.02.
- Medical transfer home for illness and/or accident.
- Sending a family member in the case of hospitalisation for illness and/or accident.
- Accommodation costs of this family member €30.05 daily (maximum 10 days).
- Repatriation for death by whatever cause.
- Travel information service.
- Urgent messages service.

With regard to **Culture and Sports**, the cultural events offered to students and to the general public are developed through the Vice-Rector of Culture and Sport.

The ULPGC takes the concept of culture from the Mundialcult event in Mexico in 1982, in which it is defined as “the collection of different spiritual, material, intellectual and affective which characterise a society or social group. It encompasses, apart from the arts, lifestyles, the fundamental human rights, value systems, traditions and beliefs”.

The ULPGC believes that part of their function is to help spread culture and promote the development of personal creativity, defending identity, but without forgetting activities which improve social harmony and encourage respect for cultural diversity as outlined by UNESCO in 2005.

The Vice-Rector of Culture and Sport is intended to be the nexus of union between the interests of members of the university community and those of society in permanent dialogue, and promotes and publicises works of art by local and international artists through concerts, exhibitions, theatre productions, etc., which contribute to an integral development.

The ULPGC considers the University to be a place of creativity and for the diffusion of critical thought, and believes in an innovative University, with alternatives, based on debate, discussion, in the contrast of ideas, beyond the regulated education which contributes to the integral development of its members. To achieve this, it is essential to have widespread collaboration and a high level of participation.

The ULPGC firmly believes that the actions of the current Vice-Rector should not only serve the University community but also act as a bridge between the ULPGC and society in general, and establish agreements with various institutions such as the Canarian Music Festival, the Las Palmas Film Festival, the Opera Festival, the Music Conservatories, etc.

The following is a list of facilities (not related to the teaching programme) which the ULPGC provides for students:

CULTURAL SOCIETIES

- Juan José Falcón Sanabria Society. A musical club which the Canarian composer Juan José Falcón Sanabria directs, promoting and co-ordinating musical activities.
- Cinema Club. This is in charge of promoting, designing and co-ordinating all those activities related to the cinema.
- Theatre Club. A club dedicated to putting the University community in contact with theatrical activities.
- Jazz and Modern Music Club. A club dedicated to promoting modern music within the University community with special attention placed on Jazz.
- Women's Society. The fundamental objective of this initiative is the collaboration in real equality for women and not discrimination.
- Manuel Alemán Society. This is an area of education culture and dialogue about Faith-Culture created by the ULPGC and the Diocese of the Canaries.
- Nature Club. A club dedicated to developing environmental education and to carrying out activities related to nature.
- The University Society for Globalisation, Peace and Interculturality Studies. A debate society about the variety of cultural currents that come together in our society through

migration.

- The General Ignacio Pérez Galdós Society for Socio-Military Studies. A club dedicated to, among other questions, to the study of the historical relationship between society and the Army.
- Comedy Club. A club dedicated to promoting the study and knowledge of the phenomenon of humour.
- Martin Luther Society. A club dedicated to the debate about the significance of the protestant reform and an analysis of its mode of expression in various fields.
- The Folklore and Canarian Enthography Club. A club dedicated to maintain the traditions and culture of the Canaries.
- Language School. An organisation dedicated to the teaching of languages within the University community.
- The Cátedra Manuel Veláquez Society. This club will be the first to have its base outside Gran Canaria, specifically on the island of Fuerteventura, taking a further step in the practical realisation of regional vocation of our University.
- The Cátedra Pérez Galdós Society is a scientific group created by the University of Las Palmas de Gran Canaria with specific cultural aims such as the recognition of and homage to the writer who gives his name to the group.
- The Wagner Club and Aesthetic Studies of the ULPGC. The interest of the Wagner Club and Aesthetic Studies concerns the increasing importance in terms of the cultural polyhedron which the name Wagner generates and its links to philosophical analysis of artistic fact as the starting point for understanding the reality of Aesthetics.
- The Eufemiano Jurado Domínguez Society. Its principal objective is to offer a general panorama on the historical evolution of the Canary Islands during the contemporary era in its different facets.
- The Cátedra Alfredo Kraus Society. This group provides to a wide audience a mixture of teaching which allows for permanent training and updating of pedagogical, intellectual and cultural aspects.

THE ULPGC ART GALLERY. The ULPGC and specifically the central office is used as an art gallery for exhibitions of painting and sculpture.

VEGUETA NIGHTS- PARANINFO. The ULPGC puts on a series of shows which periodically takes place in the Paraninfo of the central office of the ULPGC. Some of these shows offer student discounts, and also for teaching and support staff .

CULTURE CLUBS: Photography Club, Tango Club, Travel Club.

OPEN CAMPUS. Exhibitions held within the different centres of the ULPGC.

LANGUAGE SCHOOL. The language school is a service of the

ULPGC which began in the academic year 1992-93 with the objective of offering the University community and Canarian society in general the opportunity to learn foreign languages. Classes are characterised by a distinctively communicative approach. The most important part of learning a foreign language is communication, to have the ability to express our ideas to others. Therefore, in the classes, from the beginning we use activities such as pair work and group work which are supervised by the teacher. The highly qualified teachers are graduates in the corresponding languages, with a number of years of experience of teaching foreign languages to adults. The courses are structured into two four-month terms (50 teaching hours in each term, 2 classes per week of two hours). The first term runs from October to January; the second from March to June. Intensive summer courses are also offered. Different levels are taught in the following languages: English, German, Italian, Arabic and Korean, which the students can begin in any term after taking a level test, the objective of which is for the student to be placed in the proper group level. At the end of the academic year, student progress and teacher's assessment are what finally decide if the student moves to the next level. As well as this, if class attendance is above 90% of the total an attendance certificate for the four-month term is issued by the Language School of the ULPGC which reflects the level and number of hours studied that term. There are also various diplomas available for studies taken during the academic year: The Diploma of Basic Studies, the Diploma of Intermediate Studies and the Diploma of Advanced Studies.

CULTURAL COURSES AND WORKSHOPS

The concept of cultural courses and workshops is to bring together ideas or projects which respond to the cultural demands of the university community and the rest of society in general as a result of a pledge between the two. These activities intend to consolidate the institutional cultural programme which is expressed in the form of courses and workshops and are orientated with the following objectives:

- To develop personal creativity, good taste and an appreciation of the arts.
- To bring together different tendencies and disciplines in the extracurricular education of students.
- To develop a varied aesthetic education.
- To promote and spread culture especially within our immediate environment.

PRIZES AND AWARDS

The ULPG has the following prizes and awards:

- **Prizes for Creativity 2008 of Students of the ULPGC.** The ULPGC Social Council, in collaboration with the Vice-Rector of Culture and Sport awards three prizes intended to help develop creativity among the students of ULPGC, as follows: one for poetry, three for short stories and another three for multimedia creations.
- The 'Saulo Torón 2007' poetry prize.
- The "Hermanos Millares Cubas 2007" short story prize.
- The 'Blas Cabrera 2007' multimedia creation prize
- The "Jesús Arencibia" ULPGC Art prize.

SPORTS SERVICES

The ULPGC has a number of fully equipped sports facilities and services for a multitude of sports and activities.

5.2. COMMENTS

Please give general comments about the quality of the teaching programme under the above headings.

The quality of the teaching programme is satisfactory according to the regulations developed by the ULPGC and is a homogeneous system for the whole university. The Regulations of Teaching and the Evaluation of Learning and the Regulation of Academic Planning both developed in recent years have contributed to this.

As well as the Faculty, the Teaching Affairs Committee intervenes in two important aspects, which are the teaching methodologies applied and the learning objectives of the subjects, which are competences of the departments.

5.3. SUGGESTIONS

With regards to examinations, it would be better to incorporate registers which guarantee the learning objectives of the students have been reached in every subject. In many subjects, attendance at practicals is considered sufficient to pass, which does not guarantee that students have acquired the necessary skills and abilities proposed. It would be better to establish a system which guarantees the teaching quality that students receive in off-campus centres, in such a way that the activity carried out is in accordance with the minimum quality criteria. As has been stated on various occasions in this chapter it is important to incorporate within the Veterinary Faculty Quality Guarantee System evidence that the students, before finishing their studies, have acquired day-one competences.

Due to the academic workload that students have, it should be made easier for them to fit in all their academic activities in an academic year. This is especially important during evaluation periods, to which students need to dedicate a lot of time.
The introduction of external examiners is proposed, for example by the professional colleges, which would guarantee the acquisition of day-one competences, thus final degree examinations could be a prerequisite for being awarded a degree, although Spanish legislation makes these procedures difficult.

Co-ordination meetings between subjects should be programmed and registered, in such a way that an effective co-ordination is guaranteed especially on the content of subjects within the same course, as well as between courses.

To improve teaching quality it would be a good idea to encourage the participation of teachers in a teacher training programme organised throughout the whole university, especially during the next few years when new teaching methodologies directed towards the adaptation to the ESHE are introduced; at the same time the evaluation of teaching activity should be linked to the results of that teaching and not only to levels of student satisfaction.

CHAPTER VI

Facilities and equipment

6.1 FACTUAL INFORMATION

6.1.1 Premises in general

Please give a general description of the site(s) and buildings occupied by the Faculty; include a map.

The Veterinary Faculty is located in the Arucas campus of the ULPGC. This campus is in the north of the island, some 7 km from the capital Las Palmas de Gran Canaria city by the GC-2 motorway. It is in within the town boundaries of Arucas, hence the name of the campus.

This location, in an agriculture and livestock campus, next to the Experimental Farm of the Cabildo de Gran Canaria and the School of Agrarian Qualifications of the Canarian Government, allows the housing of production animals given that there is no nearby population.

The Faculty consists of several modules:

Modules 1 and 2:
Veterinary Teaching Hospital; Large Animal Hospital (1) and Small Animal Hospital (2).
Module 3:
Ossuary, Dissection Room and Necropsy Room. Food Processing Pilot Plant. University Institute of Animal Health and Food Safety (IUSA).
Module 4:
Cafeteria, Students' delegation, Classrooms 4A and 4B.
Module 5:
Farm, Animal Production and Animal Reproduction Laboratories. Cheese-making Room
Module 6:
Classrooms 6A, 6B and 6C, Main hall, Administration, Dean's Office, Library, Study Room and ticket offices.
Module 7:
Laboratories and teachers' offices.
Module 8:
Graduation Hall.
Module 9:
University Institute of Animal Health and Food Safety (IUSA).
Module 10:
Parking
Module 11:
Experimental Animal House and Experimental Surgery.

6.1.2 PREMISES USED FOR CLINICS AND HOSPITALISATION

The information to be entered in Table 6.1 is the number of animals that can be accommodated, not the number of animals used. Certain premises may be used to accommodate different species of animal. If so, the same premises should be entered only once.

Table 6.1: Places available for hospitalisation and animals to be accommodated

	Species	No. places
Regular hospitalisation	Cattle	Total = 4. Located on floor -1, is one box that can hold 4 cattle in standing places.
	Horses	Total = 3. 3 individual boxes in Equine Hospitalisation area
	Small ruminants and/or pigs	Total = 2 boxes, can be used indistinctly for these species. Located on floor -1 Small Animal Hospital. One box may hold 2 small ruminants or 1 pig, the other 4 small ruminants or 2 pigs.
	Dogs and/or cats	Total = 24. 7 boxes in ICU area 17 boxes Hospitalisation area
	Other[1]	Total = 4 terrariums. Located on floor -1 used indistinctly for reptiles or small mammals.
Isolation facilities	Farm animals and horses	Total = 3 boxes, can be used indistinctly for small ruminants or pigs. Located on floor -1 Small Animal Hospital. No isolation facilities for horses or cattle are available.
	Small animals	4 boxes in Hospitalisation area
	Other[1]	

1) please specify

6.1.3 PREMISES FOR ANIMALS

Give a description of the facilities for rearing and maintaining normal animals for teaching purposes.

If the Faculty has no farm of its own, please explain in the SER the practical arrangements made for teaching such subjects as animal husbandry, herd health, and the techniques of handling production animals.

The Faculty has a farm within the Faculty premises with:

- Seven pens to hold small ruminants with a capacity for 24 animals each.
- Two pens to hold small ruminants with a capacity for 4 studs each.
- Two rooms of 35 m^2 each to house rabbits. The capacity is for 20 females with their respective litters.
- A room of 35 m^2 with four boxes to hold small ruminants (three individual boxes and one for five young animals).
- A room of 25 m^2 with four boxes to hold small lactating ruminants, with a capacity for 40 animals.

The Faculty is located on an Agriculture and Livestock campus, through which, thanks to a collaboration contract with the Experimental Farm annex, allows us to use the infrastructures which belong to the Cabildo Insular. Currently, the following infrastructures listed below are used. However it would be possible to use more space. It is also important to point out that these infrastructures are not permanent.

- Two pens to hold three cows each.
- Two pens to hold three adult pigs each.
- One pen to hold one breeding pig.
- Two pens to hold one pig and her litter each.
- Four pens to hold six small ruminants each.

6.1.4 PREMISES USED FOR THEORETICAL, PRACTICAL AND SUPERVISED TEACHING

The same room should not be entered under two or more headings, even if it is used, for example, for both practical and supervised work.

Table 6.2: Premises for clinical work and student training

small animals	no. consulting rooms	3
	no. surgical suits	2
equine and food animals	no. examination areas	2
	no. surgical suits	1
other[1)]	Seminaries	1

[1)] please specify

Table 6.3: Premises for lecturing

Number of places per lecture hall							
Hall	Room 4A	Room 4B	Room 6A	Room 6B	Room 6C	Main hall	Gradua-tion Hall
Places	84	84	112	196	132	180	60
Total number of places in lecture halls: 893							

Table 6.4a: Premises for group work
(Number of rooms that can be used for supervised group work)

Room	Room 7B	Clinical seminary (VTH)	Media room (Library)
Places	45	20	10
Total number of places in rooms for group work: 75			

Table 6.4b: Premises for group work (Number of rooms that can be used for supervised group work)

Room	no.	Name	Places
	1	Microscope Room	18
	2	Computer Room 1	20
	3	Computer Room 2	20

Table 6.5: Premises for practical work
(Number of laboratories for practical work by students)

Laboratory	no. 1	no. 2	no. 3	no. 4	no. 5	no. 6	no. 7	no. 8
Places	10	8	8	5	8	8	8	8
Laboratory	no. 9	no. 10	no. 11	no. 12	no. 13	no. 14	no. 15	no. 16
Places	10	10	10	10	10	10	10	10
Laboratory	no. 17	no. 18	no. 19	no. 20	no. 21	no. 22	no. 23	no. 24
Places	10	8	8	20	20	6	10	8
Laboratory	no. 25							
Places	8							
Total number of places in laboratories: 241								

Table 6.5: Premises for practical work
(Number of laboratories for practical work by students)

Laboratory no.	Name	Places
1	Laboratory 1	10
2	Laboratory 2	8
3	Laboratory 3	8
4	Laboratory 4	5
5	Spectrophotometry Laboratory	8
6	RIA Laboratory	8
7	Microbiology Laboratory	8
8	Infectious Diseases Laboratory	8
9	Parasitical Diseases Laboratory	10
10	Animal Rearing & Health Laboratory	10
11	General Pathology Laboratory	10
12	Epidemiology Laboratory	10
13	Histopathology Laboratory	10
14	Animal Nutrition Laboratory	10
15	Food Technology Laboratory	10
16	Hygiene Laboratory	10
17	Agronomic Laboratory	10
18	Farm Animal Production Laboratory	8
19	Animal Reproduction Laboratory	8
20	Necropsy Room	10
21	Dissection Room	20
22	Veterinary Teaching Hospital Laboratory	6
23	Food Processing Pilot Plant	10
24	Food Protection and Food Hygiene Office (OHAPA)	8
25	Cheese Making Room	8

Please give a brief description of health and safety measures in place in the premises for practical work and in the laboratories to which undergraduate students have access.

The European legislation, in directive 89/391/CEE, called the Mark Directive, measures to promote improvement in security and safety of workers, and the Spanish legislation, through the law 31/1995 of Prevention of Risks at Work outlines preventative activities as a collection of measures to introduce in public and private companies to improve working conditions and reduce risks at work which workers could suffer.

The ULPGC, aware of the inherent risks in the workplace to public employees, and in some cases, to the rest of the University community, outlines the prevention of risks at work through the implantation of a system within the organisation to prevent damage to the collective members of the community.

In the ULPGC Statutes, in its preliminary opening which refers to nature, the mission statement, general objectives and competences of the University, states that “in the development of its activities the University will give priority to those questions which affect in a general way the present and the future of the Canary Islands, to global improvement in the quality of life of its people and to the execution of a sustainable development for the archipelago”.

The preventative system of risks at our University therefore to be seen as, from this law, a system related to other systems: education and research, personal, economic management and contracting of equipment and buildings, general services, technical unit, etc.

To put into practice preventative measures requires that there is a specialised body which the law calls Prevention of Work Risks Service, and which is defined as the collection of people and materials necessary to carry out preventative measures, with the aim of guaranteeing adequate protection of the security and safety of workers, in particular in our organisation, of public employees who make up the ULPGC.

The Prevention Service, in an interdisciplinary fashion, provides assessment and support to the design, application and co-ordination of the plans and programmes of preventative action; the evaluation of risk factors; information and training to workers; provide first aid, emergency plans and health care of the university’s employees.

Security and health, as primary objectives in the quality of the organisation and as a duty to the public employees therein is an

activity which we take very seriously, everyone according to their level of responsibility. To this end, the necessary information needs to be asked for and given, everyone collaborating in preventative measures according to their position and fulfilling our mission statement in the plans we all build.

General Information of the Risk Prevention

SERVICIO DE PREVENCIÓN
DE RIESGOS LABORALES
UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA
Edificio Antiguo de Empresariales (Despacho 108)
35017 Campus Universitario de Tafira
FAX: 928 457193
ser_prevencion@ulpgc.es

Specialities
Security at work: Tlf. 928457030
Industrial Hygiene: Tlf. 928457193
Ergonomics and Applied Psychosociology: Tlf. 928457194
Medicine at Work (Office 111): Tlf. 928457200

More specifically for the Veterinary Faculty, and related to the academic activities of the students, the teaching staff and support staff of the Faculty, special attention should be paid to the following hygiene, health and safety measures:

In the **handling of animals,** safety is a priority. The inherent risks and dangers of handling animals need to be taken into account, and so measures are taken as protection by way of restraining methods (muzzles, reins, handling ropes, etc.) to subdue the animals and if necessary sedation/tranquillisation by the correct procedure.

In the **laboratories**, before beginning practical work, students receive basic safety instructions about good practice procedures to ensure safety. The laboratories have available safety measures established by Spanish law, such as extinguishers, biological and chemical waste receptacles which are maintained by the support staff. Students must wear lab coats and protective gloves when necessary.

There is a specific risk prevention programme for the **VTH** developed by the Canarian University Foundation of Las Palmas (FULP). Students are especially warned of the risks of radiological activities, and necessary measures are taken to reduce the risk of radiation. Both the teaching staff and the support staff are very careful in following the correct safety measures procedures.

6.1.5 DIAGNOSTIC LABORATORIES AND CLINICAL SUPPORT SERVICES

- Diagnostic laboratories
  Briefly describe the facilities available for clinical diagnostic work.

• Pathological Anatomy Diagnostic Service

The **Pathological Anatomy Diagnostic Service** is integrated in the Comparative Anatomy and Pathological Anatomy Area and its objective is to be a diagnostic support to veterinarians and farmers in the Canaries. The Service is set in the University-Business activities and functionally depends on the FULP. The Service offers histopathological diagnostic support to biopsies sent, as well as a necropsy and diagnostic service. To this end, a Necropsy Room in Module 3 is available (Morphology Module) and in the departmental building (Module 7) there is a Histopathology Laboratory, Histopathological Diagnostic Laboratory and a Immunohistochemical Laboratory. The equipment is adequate for the services provided, in the necropsy rooms which have a cutting and processing room (2 tissue processors), an archive room, a photography room and a necropsy area, all fully equipped. The Histopathology Laboratory has a cutting area (3 microtomes) and tissue stainer; and the Histopathological Diagnostic Laboratory has multiple microscopes (10 positions), double microscope and a photography system. The Immunohistochemical Laboratory has an archive of used serums (2 refrigerators), incubators, analytical scales, conventional scales and micropipettes.

In the last three years the number of cases of Cytologies and Histologies and the necropsies carried out were:

	2007	2006	2005	Average
Cytologies and Histologies	1612	1494	1233	**1446**
Necropsies	607	724	718	**683**

• Parasitological Diagnostic Service

In the departmental building (Module 7) is the **Parasitological Diagnostic Service**. The service has its own laboratory with sufficient equipment and has support in other laboratories in the Faculty, such as the laboratory of processing animal faeces, sterilisation, cameras etc. The methods of laboratorial diagnostics are carried out by students on clinical samples sent by the VTH, or collected in field practicals and are the following:

- Coprological Exams. Qualitative methods such as: ClNa Flotation, SO_4Zn Flotation, Formol-Ether Sedimentation, Baerman and Kinyoun staining (*Cryptosporidium*) and quantitative methods such as McMaster.
- Smear Staining: (Hemoparasites) or punctures (*Leishmania*) and special: Histochemical (*D. immitis*).
- Direct Immunofluorescence for the diagnosis of *Cryptosporidium/ Giardia*.
- Study of skin shavings cleared with Lactofenol.

To carry out these activities, optical and fluorescence microscope equipment is available as well smaller equipment (centrifugal, incubators) necessary.

In the last three years the Laboratory has carried out the following analyses:

Species	2007	2006	2005	Average
Small ruminants	-	2477	1606	**2041**
Pigs	-	1231	1108	**1169**
Rabbits	-	2078	1594	**1836**

• Clinical and Analytical Toxicology Service

The **Clinical and Analytical Toxicology Service** offers society services related to determining toxins in different biological matrices. Specifically it is currently the Reference Laboratory of the Las Palmas Institute of Legal Medicine which depends on the Ministry of Justice. It also offers service to any private or professional individual (veterinary and human clinics) who asks for this type of analysis.

The Clinical and Analytical Toxicology Service has the following large equipment:

1. Chromatography: 1 LC/MS/MS, 1 HPLC/DAD, 1 HPLC/UV-Vis (REMEDI DRUG PROFILING SYSTEM), 2 GC/MS/MS, 1 GC/FID, 1 GC/NPD-ECD.
2. Spectrophotometry: 1 Beckman DU7400 with Diode Array
3. FPIA: Axsym Abbott Autoanalysor.
4. Sample Preparation: 1 Automatic Soxhlet Foss Tecator, 1 SPE Automatic equipment, 1 GPC, 2 SPE Water Systems, 1 Labconco multiple sample Concentrator, 1 Techne simple sample Concentrator.

The average of analyses carried out over the last three years 2005-2007 have been:

1. Samples for the Legal Medicine Institute (Instituto de Medicina Legal): approximately 3,000 annually.
2. Samples for other human cases: approximately 20 annually.
3. Samples for other veterinary cases: approximately 20 annually.
4. Food Samples: approximately 50 annually.

• Infectious Diseases Unit Diagnostic Service

The Infectious Diseases Unit Diagnostic Service offers a diagnostic laboratory of infectious pathologies to Canarian society in general, and to farmers and veterinarians who require it in particular. Among the services offered are: bacterial culture and sensitivity (aerobes and anaerobes), culture of bacteria of special requirements (mycobacterium, mycoplasmas, clostridia, etc.), culture and bacterial identification, autovaccine, serologic diagnostic techniques: ELISA, Immunofluorescence, Seroneutralisation, etc., PCR technique and mycological diagnosis. To achieve this, all the necessary equipment to carry out different techniques are available, such as microscopes, biological security chambers (horizontal and vertical flow), incubators, anaerobic chambers, ELISA reader, thermocycler and electrophoresis, different fungible material according to the agent to be identified: measures of ordinary and special cultures, sterile loops, pipettes, pipette points, API identification galleries, automatic reader for API identification galleries, etc.

In the last three years the Laboratory has carried out the following analyses in pets and food producing animals:

	2007	2006	2005	Average
Culture and sensitivity	37	20	46	34

• Other diagnostic laboratories and support installations to the laboratories.

The **Food Hygiene and Food Safety Office** (OHAPA) has a Laboratory in the departmental building. This Laboratory has the following equipment:

- Vidas system for the detection of *Salmonella* sp., *Listeria monocytogenes*, *Staphylococcus* toxin and emerging pathogens in food.
- Decagon CX-1 and CX-2 dew.point hygrometer to determine the activity of the water in foods.
- Bioluminometer based on the detection of the ATP bacteria, by contamination on surfaces.

The Faculty has other laboratories, such as the **Microbiology Laboratory** and the **Epidemiology Laboratory,** all equipped with the necessary equipment for microbiological diagnosis and to carry out teaching and research activities.

In the Departmental building, on the first floor is the Biotechnological Instrumentation Laboratory which includes the following laboratories / central services and common to all laboratories and services: Nº 94 Chambers and Freezers, Nº 95 Sterilisation, Nº 97 Technical room, Nº 98 Processing animal faeces, Nº 99 Centrifugation and Nº 100 Image processing.

Central clinical support services: Indicate the nature of these services and how they are organised (e.g. diagnostic imaging, anaesthesia, etc.)

• Clinical Analysis Laboratories

The **Clinical Pathology Laboratory** is located in the Veterinary Teaching Hospital which offers services of laboratorial diagnosis of haematology and clinical biochemistry to the clinical services of the VTH, as well as third parties. The laboratory has the following equipment:

- LaserCyte – Iddex ® Haematological Analyser
- VetTest – Iddex ® Biochemical Analyser
- SNAP Reader– Iddex ® Hormonal Analyser
- Vet-Stat – Iddex® electrolyte and acid-base balance Analyser
- Multiple microscopes (3 positions).

In the last three years the Clinical Pathology Laboratory of the VTH has analysed:

	2007	2006	2005	Average
Clinical Analysis	1469	820	941	**1076**

In the Departmental building, the Internal Medicine Unit has a diagnosis Laboratory, the **Laboratory of General Pathology**, in which this subject is taught and also serves as diagnostic support to research activities in the unit. With regard to this last point, over the last three years, more than 1,000 samples have been analysed on camelids as well as other domestic species such as horses, bovines, goats and sheep through serologic and parasitological tests of trypanosome (*Trypanosoma evansi*). The samples analysed came from animals in the Canaries and from other points of mainland Spain; some samples came from continental Africa (Morocco, Mauritania, etc.). Students have actively participated in the collection of samples and their analyses. These studies have been financed by research projects on control measures and eventual eradication of animal trypanosomes in the Canaries and on new diaminuria in the treatment of *Trypanosoma evansi* in goats.

• Hospitalisation and Intensive Care Service

The VTH has a **Hospitalisation and Intensive Care Service**. Two experienced full-time contracted veterinarians are responsible for this service. It is open 24 hours a day 365 days a year. From 8.00 am to 9.00pm one of the two veterinarians supervises directly this service. At night from 9.00pm to 8.00 am the hospitalised animals are supervised by veterinary interns, although experienced veterinarians are available by phone every day. On Saturday afternoons, Sundays and holidays, the timetable is the same as at night-time. The veterinarians responsible for the service alternate weekly their shifts. This Service lends support in care and hospitalisation tasks to other clinical, medical and surgical services. The Service is organised along guidelines which establish protocols of action and documentation. There are numerous continuous infusion machines available for fluidotherapy, and incubators for oxygenotherapy.

• Diagnostic Imaging Service

The VTH has a **Diagnostic Imaging Service** which gives diagnostic, radiological, ecographic and endoscopic support. The Radiological studies are carried out by support staff from the VTH. One of the contracted veterinarians is responsible for supervising the functioning and quality control of the teams. The radiological interpretation is carried out by the services and the radiology teacher acts as a consultant. The Radiological studies can be carried out 24 hours a day, 365 days a year.

The Service has two X-ray rooms available, one in the Small animals building (Module 2), which has a Bennet Model HFQ 300p machine and a Bennet Model HFQ 12050p X-ray machine for large animals in the Large Animals building (Module 1). The rooms are isolated and fulfil current legislation.

The facilities and devices are checked by the Radiological Protection Unit (RPU), a Centralised Service of the ULPGC. The RPU has a specialised radiology technician, who carries out tasks of quality control, maintenance, and legally required safety measures in collaboration with the person who has overall responsibility for the service, the radiology teacher and the managing director of the hospital.

The Service complies to the specific regulations of, and has been approved by the Nuclear Safety Board (*Consejo de Seguridad Nuclear*), the body which regulates equipment, activities and services of radiological diagnosis in Spain, including the obligatory appointment of a licensed Director of Radiodiagnostic Equipment.

The ecographic studies are carried out by different services, particularly reproduction, internal medicine and ophthalmology. They have use of a echo-doppler colour Toshiba Nemio SSA-550 ecograph with a Mitsubishi P66E printer an a digital image recorder.

The VTH also has a videoendoscopy machine which is used by the clinical services.

• Anaesthetic Service

The Anaesthetic Service carries out sedations and anaesthetic procedures required by the patients of the VTH (including exotic, small and large animals) for surgical procedures as well as for out-patient services (radiology, clinical tests, diagnostic test, treatment of wounds, etc.). The service is well equipped with five anaesthetic gas machines, two monitoring systems (capnography, ECG, non-invasive pressure and pulsioximetry). It also has a portable pulsioximetry. The Anaesthetic Service is integrated within the Surgical Service and works 24 hours a day, 365 days a year. The support staff of the VTH is efficiently trained to carry out these activities, and together with the teacher of surgery who offers clinical services, are in charge of carrying out and supervising anaesthetics. The students are encouraged to actively participate in anaesthetic monitoring through the anaesthetic register.

The VTH has auxiliary personnel as help and support in functions such as washing, sterilisation, animal care, maintenance, etc.

6.1.6 SLAUGHTERHOUSE FACILITIES

Describe briefly the slaughterhouse facility to which the Faculty has access, including distances from the Faculty and level of activity.

Students have access to the Gran Canaria Island Slaughterhouse (*Matadero Insular de Gran Canaria*), which belongs to the Cabildo of Gran Canaria and is managed by a private company. The veterinary inspection services are carried out by staff from the Gran Canaria Health Area of the Canarian Health Service of the Health Department of the Canarian Government. Specifically, three Veterinary Inspectors work in the Island Slaughterhouse, two of whom are associate teachers of health sciences who work part-time in the area of Nutrition and Bromatology in the Animal Pathology, Animal Production, Bromatology and Food Technology Department. During the academic year, students from the Faculty, specifically those matriculated in Hygiene, Inspection and Food Control, visit in groups of six students for a total of 15 hours, on Mondays, Tuesdays and Thursdays for five hours.

The activity of the slaughterhouse is shown in the following table:

Table 6.1.6.1. Production Data of the Gran Canaria Slaughterhouse (Pigs and Ruminants).

	BOVINES		PIGS		GOATS		SHEEP	
YEAR	NC	W	NC	W	NC	W	NC	W
2005	3,742	1,012,520	24,525	1,897,914	3,934	43,360	1,225	12,134
2006	3,006	784,941	18,299	1,331,637	3,992	46,164	1,373	13,665
2007	2,651	728,176	18,975	1,444,504	4,504	49,397	1,580	13,353

NC: Number of Carcasses processed per year.

W: Total Weight in Kg of Carcasses obtained per year.

Table 6.1.6.1. Production Data of the Gran Canaria Island Slaughterhouse
(Poultry and Rabbits).

	COCKS	HENS	RABBITS
YEAR	NC	NC	NC
2005	1,561,605	116,589	42,135
2006	1,653,373	108,673	43,778
2007	1,745,971	150,688	35,770

NC: Number of Carcasses processed per year.

6.1.7 FOODSTUFF PROCESSING UNIT

Describe briefly any access that the Faculty has to foodstuff processing units.

The ***Food Processing Pilot Plant*** is built on an architectural reformation of the old animalarium of the Veterinary Faculty. The unit has a total surface area of 115 m^2, including a store room of 9 m^2 separated from the rest by partitioning and an access door. It has a large amount of natural and artificial light and has excellent ventilation. The access to the unit is via two wide doors (each one 2 m. long) sufficient for the movement required by the unit. The walls are tiled to ¾ height. A marble runs down one side of the plant, in the form of a Laboratory table, with cupboards and shelves below. Built into the table are two sinks, as well as a third industrial sized sink at one end. It has hot and cold water points and easy access to work at, and also for draining and cleaning. At the time this document was written, it was in the process of being re-equipped, so that it currently has only one cutter with different blades for vegetables and a 50 litre pot. During 2007, the laboratory had the following equipment: Stuffer for medium high and medium low viscosity food, large refrigerator, industrial cooker and oven, mixer, vegetable slicer, kneading machine, emulsionor, three months of work of stainless steel, crushing machine, extractor, grain scales, two pH-meters.

The Food Technology Unit also has a laboratory, equipped with a rotational and capillary viscometer, measure of water activity, and a manual centrifugal refractometer.

In Chapter 5 other food technology installations to which the students have access and which are not part of the Faculty are described.

The Faculty has also a ***Cheese-making Room*** located in the Farm, and this premise is used for several practices (cheese making, butter making and yogurt making). The equipment of the Cheese-making Room includes: goat cheese 200 g molds, pH meter, thermometer, hydraulic press, cheesecloth, cold brine, cheese vats, steel tables, coller, creamer, churn, MIRIS milk analyzer, and DCC somatic cell count device (DeLaval).

6.1.8 WASTE MANAGEMENT

Briefly describe the systems and equipment used for disposing of waste material; cadavers, carcasses, biological waste of different types, excreta, etc.

Conscious of being part of an island territory in which the natural environment and conservation factors have special relevance, the ULPGC wants to make a promise to sustainability as one of the keys to its identity. It has therefore proposed to commit itself, in the Institutional Strategic Plan for 2007-2010, to develop a various activities in two converging strategic lines: one internal, directed to maximising the potential of the integrated system of environmental management with the aim of making the University a reference in the practice of sustainability; and another external, orientated to the involvement of the University in the planning of sustainable growth of the Canaries, with special emphasis on environmental protection.

Within this general picture is the Integrated Programme of Waste Management at the ULPGC (PIGRU), which the ULPGC Government Board approved at the initiative of its Environmental Policy Committee. With this they intended to provide the ULPGC with all the means necessary to make a coherent management of the waste we generate in carryout out our university activities. The PIGRU therefore fixes the objectives and actions which with the co-operation of everyone we can have an environmental behaviour in tune with the environment. It is an ambitious document inspired in its principles by prevention and recycling ad which gives priority to collaboration, education and the participation of all members of the university community in waste management.

All the information about the Integrated Programme of Waste Management at the ULPGC can be found at the following URL:

http://www.webs.ulpgc.es/cpa/Contenido/Descargas/PIGRU.pdf

6.1.9 FUTURE CHANGES

Outline any proposed changes in the premises that will have a substantial effect on the Faculty, and indicate the stage which these have reached.

At present, the Rector's team has promised to buy a magnetic resonance machine. A refurbishment project of the VTH is in operation which includes installing this new equipment.

To address some of the problems mentioned above, the Faculty has suggested to the Rectorate the construction of a dairy, pig and poultry farms. The Faculty has already launched an ambitious project in collaboration with the Cabildo de Gran Canaria, making it possible for the Faculty to have these installations permanently. This project was presented to the Rector at the end of 2007 and is being studied.

6.2 COMMENTS

Comment on the adequacy of the buildings in general for undergraduate teaching.

The academic installations of the Veterinary Faculty are adequate for the number of students we have, and the number of laboratories and rooms are sufficient to not cause problems for the academic organisation of the Faculty. At times, there is a certain amount of overuse of the microscopy room, but this situation can be corrected by timetable modifications to avoid such problems, but there are never overbooking.

However, the **Veterinary Teaching Hospital** has limited installations which restrict its development and growth. Specifically, the number of consultation rooms for small animals is limited (3 rooms), and this means that during the mornings the Hospital is often too full. The consultancy rooms 2 and 3 are too small to attend to the patient and a group of students. The possibilities of enlarging the building are limited.

With regard to large animals, the number of hospitalisation boxes for horses is very limited which produces a restriction on the number of horses hospitalised or in need of hospitalisation. The lack of a riding area restricts the number of horses hospitalised and their maintenance and correct care cannot be guaranteed.

The operating theatre for horses, due to its design, does not meet the sufficient conditions of sealing to allow surgery to be carried out with the guarantee of sterile conditions.

There are no adequate installations for cattle, as there is no unloading bay, exploration room nor adequate equipment for handling (reins, harnesses, etc.).

With regard to the **Production Farm**, it is small, which limits the number of animals and species housed, which makes it necessary to collaborate with other institutions such as the Cabildo Insular to use the facilities of their experimental farm, located next to the Faculty. The great inconvenience of these facilities is that they do not allow the animals to stay throughout the year, as during the month of May there is a large agricultural show, and the needs of this show include the sanitary emptying of the facilities for a whole month previous to the show. These circumstances force us to rehouse the animals in other temporary facilities, with the drawbacks that this brings, in both handling and management and costs.

Comment on the adequacy of the equipment in general for undergraduate teaching.

The laboratories have the equipment adequate to carry out the practicals of the subjects.

The microscopy room has recently been furnished with microscopes and flat screens.

The computer rooms are fully refurbished every four years, for which the Faculty provides 6,000 € annually.

Comment on the maintenance of buildings and equipment.

The maintenance of the buildings is one of the functions of the Central Administration, which has its own maintenance staff and centralised services of the University who are in charge of these operations. The administration has its own budget for these activities.

The VTH has its own support staff, in charge of maintenance tasks of the buildings and equipment, and the maintenance activities in the installations.

As far as the maintenance of equipment is concerned, this is one of the functions of the departmental Head of Services. Each department has its own budget for these maintenance and equipment repair activities. For the common laboratories of the Faculty, the Administration of the centre is in charge of its maintenance and this is funded by a budget from the Faculty.

6.3 SUGGESTIONS

If you are unhappy with any situation, please list any improvements you would make in order of preference.

The Faculty has no rooms for group work where the students can sit and study, they have only one study room(where no talking is allowed) and a library. In the classroom building (Module 6) there are tables which allow group work, but they are not set apart or separated. Adaptation to the ESHE requires the modification of the installations and the introduction of work rooms for students to carry out study, seminars or workshops. Currently we have applied for room 7B to be divided in two to allow two rooms for these activities.

The facilities for the large animal clinic, both horses and ruminants, have been an important weakness in the Faculty since its inception. The construction of adequate installations should be a priority for the clinical attention of these species, and in particular: for the service of horses, the construction of hospitalisation boxes and a riding school; and for the service of ruminants, the construction of an unloading bay, with handling equipment for access to the exploration room, operating theatre and hospitalisation boxes. The Hospital has no hospitalisation boxes for the isolation of horses and large ruminants with infectious or parasitical diseases.

The size of the hospital vehicle used as an ambulance service for horses and the veterinary vehicle for ruminants does not allow a sufficient number of students to attend each visit in these services. What would be ideal is that the hospital should have its own vehicles sufficiently big enough for groups of four or five students. The ambulance service, especially that of ruminants, should have its own vehicles which would allow more students per visit to be incorporated.

In the next few years, if the number of cases of the clinical services for small animals continues to grow as is seen in the statistics, the hospital will be too small, and will need extending, remodelling or even, if the ULPGC considers and finances it, the construction of a new bigger hospital. The ULPGC does not have a provision for medium or long term needs, and so stating this need is important in future strategic plans.

The Faculty farm is small. It would be ideal to have more land available for the construction of productive units or pilot farms of at least the most important productive species such as dairy cows, egg laying hens, broilers, rabbits and pigs; this would allow the full productive cycles of these species to be continued, which would be linked to the active participation of students in following this productive cycle annually. This would require institutional support to create infrastructures and an initial investment; as well as promising to maintain these installations on behalf of the academic institution, as neither the Department, nor the Faculty, have sufficient resources to be able to carry out the maintenance of these installations, which could be managed by the Canarian University Foundation of Las Palmas (FULP), given the advantages that the Foundation has in its management, as it currently does with the Veterinary Teaching Hospital.

CHAPTER VII

Animals and Teaching Material of Animal Origin

7.1 FACTUAL INFORMATION

7.1.1 Anatomy

Indicate the materials that are used in practical anatomical training, and how these are obtained and stored.

Bones, viscera, cadavers and live animals of different domestic animals species (dogs, cats, equines, bovines, caprine, ovine, porcine, poultry and exotics) are used for the practical anatomy training of the students. TC and MRI images of dogs, cats and equines are also used.

Dog and cat cadavers come from the Island Animal Sanctuary (*Albergue Insular de Animales*) which gives us animals put down for humanitarian reasons. The cadavers used come from animals that have died from non-infectious diseases. The viscera of different species are obtained from the slaughterhouse.

All the materials are stored using different conservation methods, depending on their future use: refrigeration, freezing, or other specific fixation techniques. Some specimens may be stored in containers with preserving solution for several years. The Anatomy Unit already has a complete collection of bones and skeletons of the different domestic species. This collection is stored next to the dissection room. In addition, students use resin anatomic models in their training.

Table 7.1: Material used in practical anatomical training

	dogs		ruminants		equines		other	
	Year 2007	Year 2006	Year 2007	Year 2006	Year 2007	Year 2006	Year 2007	Year 2006
live animals[1)]	5	5	-	-	-	-	5 birds	5 birds
cadavers[1)]	60	60	15	15	15	15	9 pigs 30 birds	9 pigs 30 birds
specimens[1)]	15[3]	15[3]	14[3]	14[3]	12[3]	12[3]	5[3]	5[3]
other[2)]	100[4] 30[5]	100[4] 30[5]	25[4] 15[5]	25[4] 15[5]	20[4] 15[5]	20[4] 15[5]	10[4] 10[5]	10[4] 10[5]
e.g. ultrasound								
computer assisted teaching								

[1)] give figures

[2)] indicate,

[3)] anatomical preparations corresponding to muscular dissections

[4)] bone preparations

[5)] isolated organs or macroscopic cuts, larynxes, tongues, etc.

7.1.2 PATHOLOGY

Indicate the nature and extent of any additional sources of material for the teaching of necropsies and pathological anatomy, including slaughterhouse material.

Table 7.2: Number of necropsies over the past 3 years

	species	Number of necropsies			Average
		year 2007	year 2006	year 2005	
Food-producing animals	cattle	4	15	5	192.3
	small ruminants: ovine caprine	2 38	7 49	18 49	
	pigs	35	40	14	
	other farm animals: - fish (approx.) - dromedary camel	100 -	100 1	100 -	
Equine	equines	5	18	18	13.6
Poultry	birds	181	130	206	172.3
Rabbits	rabbits	5	18	21	14.6
Companion animals/exotic	dogs	279	305	315	339.6
	cats	37	41	42	
	others: - cetaceans - sea turtles - reptiles - rodents - ferrets - marsupials - primates - viverrids	 51 25 12 5 1 - - -	 43 12 26 5 - 1 1 5	 47 17 25 2 - - - 1	93.3

The cadavers for necropsy are sent to the Anatomopathological Diagnostic Service and come principally from the VTH and the Faculty Farm, private clinics, large farms (pigs and poultry) zoological centres, and the Island Animal Sanctuary. In this last case, in spite of the huge efforts made by this institution without payment in donating animals, a large number of animals are put down each year for humanitarian reasons, according to current Spanish legislation.

The ULPGC has an agreement signed with the Ministry of Agriculture for the training of graduates from different Autonomous Communities in actions of whale and dolphin strandings, and specialisation in the pathology of whales and dolphins. The Faculty is also a world reference centre (*International Whale Commission*) for the diagnosis of unusual deaths of whales and dolphins.

7.1.3 ANIMAL PRODUCTION

Indicate the availability of food-producing animals for the practical teaching of students

a) on the site of the institution;
b) on other sites to which the institution has access.

Currently in the Faculty Farm we have 190 goats, 4 cows and 14 rabbits (2 breeding).

The milk production systems are based on goat's milk. This system has many similarities to cow or sheep's milk production. The production is subdivided into three batches with the aim of achieving a homogeneous milk production throughout the year, and that students can understand the handling of batches that this system requires.

It is true that the Faculty is lacking somewhat in terms of animal availability, for example in beef and the intensive meat producing systems in pigs.

In the core subject ***Animal Production and Veterinary Hygiene*** a model dairy farm is visited, located in Tara valley in the municipality of Telde, which has 70 cows in milk production, 9 dry cows and 12 young replacement cows.

Two of the practicals included in the core subject ***Etology, Animal Protection and Ethnology*** take place on farms which do not belong to the institution. On one of them, students make a morphological evaluation of cow's milk using the Lineal Qualification Manual which follows the National Confederation of Spanish Friesian Associations. This farm (ANCRUFIR DISTRIBUCIONES S.L., San Felipe, Moya) has 30 productive Friesian cows and their calves, 3 bulls and 4 Canarian cows.

The other centre is a riding school (CENTRO HIPICO DE ARUCAS, Arucas) which has 45 horses of different breeds on which students can write reports following the official model of the Agriculture Department of the Canarian Government.

Elsewhere, within the subject of ***Fish culture***, a total of three practical sessions are held in the holding of Marine Cultures of the Canarian Institute of Marine Sciences. The species present which the students can work with are sea bass (lubina), bream (dorada) and blue marlin (bocinegro). In total this installation has a capacity of 500 m^3 divided into 200 tanks of sizes between 0.5 and 40 m^3.

Also within the subject of ***Fish culture*** there is a practical session in a fish factory (ADSA, San Bartolomé de Tirajana) which works with the fattening of bream, sea bass and sole.

7.1.4 FOOD HYGIENE/PUBLIC HEALTH

Indicate the availability of farm animals and products of animal origin for the practical teaching of students in veterinary public health, food hygiene, inspection and technology.

The students also take part in Food Safety activities, in the Hygiene, Inspection and Food Control Unit whose services are offered through the **Food Hygiene and Food Protection Office** (OHAPA).

In the last three years, the services offered through agreements have been:

1. Collaboration agreement between the Cabildo of Gran Canaria, the ULPGC and the FULP for applied research relative to the hygienic-sanitary practices of traditional cheeses Gran Canaria.
2. Collaboration agreement between the Cabildo of Gran Canaria, the ULPGC and the FULP for applied research relative to the hygienic evaluation and comparative value of the installation of auto-control systems in traditional cheeses.
3. Collaboration agreement between the Gran Canaria Poultry Health Defence Collective, the ULPGC and the FULP to carry out analyses of bromatological quality in hens' eggs.
4. Hygienic-Sanitary and Food Analysis Reports Service.
5. Inspection Service and Hygienic-Sanitary Auto-control in the communal canteens and self-service machines of the ULPGC.
6. Auto-control activities in HACCP system for the AMFM company.
7. Assessment Service in Food Hygiene and Food Safety.
8. Collaboration agreement between Mr. Orosmán Burgueño Güelmo, the ULPGC and the FULP to carry out the Common Programme of Honey Quality in Gran Canaria.

In the OHAPA the following number of samples have been analysed in the last three years:

Type of sample (Agreement)	2005	2006	2007
Canarian Cheese (1, 2)	5	406	233
Eggs/Water (3)	112	351	332
Reports and Analysis (4)	143	57	128
Canteens of ULPGC (5)	40	117	119
AMFM company (6)	38	215	231
Assessment SA (7)	135	95	56
Canarian honey (8)		33	15
TOTAL	**473**	**1274**	**1114**

7.1.5 CONSULTATIONS AND PATIENT FLOW SERVICES

7.1.5.1 Consultation

State the number of weeks, in the course of the year, during which the clinics are open.
State the number of consultation days each week.
State the consultation hours.

The VTH is open 24 hours a day, all year round. Consultations are open from Monday to Friday for appointments. The timetable for specialist consultations is 9:00 to 13:30 (see the detailed timetable for each service below). The time for general consultations is 9:00 to 21:00. The emergency timetable is from 21:00 to 9:00.

The emergency services and the intensive care is open 24 hours a day, 7 days a week.

SMALL ANIMALS

Clinical Services	Timetable
Internal Medicine	Monday to Friday, 9:00 to 13:30
Surgery	Monday to Friday, 9:00 to 13:30
Exotics	Thursday, 9:00 to 13:30
Dermatology	Monday and Wednesday, 9:00 to 13:30
Ophthalmology	Monday and Thursday, 9:00 to 13:30
Reproduction	Wednesday and Friday, 9:00 to 13:30

General Clinical Services	Timetable
Consultation (First opinion)	Monday to Friday, 9:00 to 21:00 Saturdays, 9:00 to 13:30
Clinical Pathology Laboratory	24 hours
Imaging Diagnosis	24 hours
Hospitalisation and Critical Care	24 hours
Emergency	24 hours
Anaesthesia	24 hours

LARGE ANIMALS

Livestock	Timetable
Consultations (at VTHI)	Monday to Friday, 9:00 to 13:00
Ambulatory Clinic	Monday to Friday, 9:00 to 13:00
Emergency	24 hours on call

Equines	
Consultations (at VTHI)	Monday to Friday, 9:00 to 13:00
Ambulatory Clinic	Monday to Friday, 9:00 to 13:00
Emergency	24 hours on call

7.1.5.2 PATIENT FLOW

The number of animals to be stated are for all disciplines combined (medicine, surgery, reproduction, etc.). In Table 7.3 only animals coming into the Faculty should be included. Animals studied in practical teaching outside the Faculty should be entered in the section entitled "Ambulatory Clinic" (Table 7.4).

The term "consultation" refers to those patients which come in and go out during daily consultation hours. "Hospitalisation" refers to those patients which are retained in the clinic as "stationary patients" following presentation.

Table 7.3: Number of cases: a) received for consultation, and b) hospitalised in the Faculty clinics, in the past three years.

Species		Number of cases						Average
		2007		2006		2005		
		a	b	a	b	a	b	
Food producing	Bovine	-	-	9	-	26	-	49.33
	Ovine, caprine	8	-	16	1	59	-	
	Porcine	6	-	8	-	15	-	
	Other farm animals	-	-	-	-	-	-	
Poultry		-	-	-	-	-	-	
Rabbits		40	-	18	-	3	-	20.33
Equine	Equines	-	56	-	38	-	62	52.0
Companion animals/exotics	Canine	2308	1073	589	730	575	701	2535.66
	Feline	529	152	260	145	44	235	
	Other:	137		65		44		
	Birds	18		10		12		
	Small Mammals	49		33		8		
	Reptiles	70		12		24		

Due to the special characteristics of our Large Animal Hospital Facilities (see Chapter 6.2), most of the cattle and equine patients are not seen in the VTH's facilities, they are visited by means of the Mobile Clinic Service, or are hospitalised and therefore included in Table 7.4.

7.1.6 VEHICLES FOR ANIMAL TRANSPORT

State the number and nature of the Faculty vehicles that can be used to bring sick animals to the clinics.

The VTH has one truck which is used for the transportation of animals. This vehicle is used to transport ruminants from the farms, and to bring small animals from the Island Animal Sanctuary which is close to the hospital. Small dogs and cats are transported in the vehicle's cabin.

The VTH has also a Hyundai H1 vehicle which the Equine Ambulance Service uses. This service has a trailer van which is used to transport horses to the VTH.

The Ruminant Ambulance Service, given that services are offered on a self-employed basis, uses their own vehicles for the transportation of students.

7.1.7 ON-CALL EMERGENCY SERVICE

Outline what emergency service is available (full-time, 24 h service, ON-CALL or 8-22 h duty) and discriminate for species.

The VTH (Small Animal Clinic) is open 24 hours a day and the services offered are:

- Emergency Consultations
- Hospitalisation and Intensive Care
- Laboratory
- Radiology
- Reproduction and Neonatology Emergency Service

Equines

The Equine Service offers service from 9:00 to 17:00. The appointments of the service are organised directly by the clinic. The rest of the day (17:00-9:00) emergencies are attended to by phone (690809441), staffed by an intern (currently Lidia Pitty). Customers can also directly contact any of the equine veterinarians: 659140807 (Prof. Francisco Doreste) or 679430599 (Luigi Díaz).

Ruminants

The Ruminant Service offers service from 9:00 to 17:00. The appointments of the service are organised directly by the clinic. The rest of the day (17:00-9:00) emergencies are attended to by phone 650392339 (Marco Suárez).

7.1.8 ON FARM TEACHING AND OUTSIDE PATIENT CARE

7.1.8.1 Ambulatory (Mobile) clinic

The Ambulatory (Mobile) Clinic is defined as a unit which provides on-call outside services to farms and other institutions and is generally operated on a commercial basis.

- State the number of hours of operation per week. Is emergency service provided 24 h/day, 365 days per year? What is the degree of student participation (include duties)?
- State the number, the type and the seating capacity of the vehicles used to transport students working in the ambulatory (mobile) clinic.
- State the approximate number of sick animals (specify cattle, swine, equine, poultry or small ruminants, others) seen by the ambulatory clinic per year during the past three years (Table 7.4).
- State the average number of visits in a year made by the ambulatory clinic to farms and other institutions.

The Large Animal Ambulatory Clinic offers continual service from Monday to Friday.

Equines

The Equine Service offers service from 9:00 to 17:00. The appointments of the service are organised directly by the clinic. The rest of the day (17:00-9:00) emergencies are attended to by phone.

In the Equine Clinic during 2007-2008, every day two students (one from *Propaedeutics* and one from *Internal Medicine II* in the first semester, and one from *Surgery II* and one from *Internal Medicine I* in the second semester), are enrolled at the Equine Mobile Clinic with one veterinary surgeon. Depending on the appointments, the return time to the VTH is variable (normally more than six hours), however the student time assignation has been standardised at 3.5 hours to allow time for transportation.

The students participate initially in the preparation of the material needed for the day, depending on the scheduled appointments. During visits the students are taught by the staff veterinarian and the intern on the essentials of horse care, the appropriate approach to horses and equine preventative medicine. Then the students make the physical examination on patients including taking the temperature, eye and mouth examination, heart and lung sounds and motility evaluation.

The students also help perform an ultrasonographic examination. Afterwards the problems are discussed by the students and veterinarian and a differential diagnosis is elaborated. The treatment plan and follow up is then explained to students.

In the Ambulatory Equine Clinic students attend every day (Monday to Friday). The approximate number of visits in one year is more than 150.In the vehicle a total of two students per visit can be accommodated.

Ruminants

The Ruminant Service offers service from 9:00 to 17:00. The appointments of the service are organised directly by the clinic. The rest of the day (17:00-9:00) emergencies are attended to by phone.

Every day two students (one from *Propaedeutics* and one from *Internal Medicine II* in the fist semester, and one from *Surgery II* and one from *Internal Medicine I* in the second semester), are enrolled at the Ruminant Ambulatory Clinic. Students talk to the veterinary surgeon (staff) in Las Palmas by phone for transportation to the farms in his private vehicle. Depending on the agenda the visits are varied, however the duration of the activity every day.

In the Ruminants Ambulatory Clinic students participate actively in the clinical activities which take place on the farms, and attend, with the veterinarian, to medical and surgical patients.

On a routine basis, the students carry out the following activities: in general they do the handling of the cattle on the farm, and keep the animals still for identification, vaccination and deparasitation purposes. With regard to medical treatment, the students are involved in checking and evaluating cows that have recently given birth, revision of post-birth discharge and cases of metritis, as well as the administration of intrauterine balls. In dry cows, students participate in vaccination and drying activities. With regard to surgical procedures, students take part in major surgery which takes place on the farms themselves, such as dehorning surgery, abomasum surgery and podology (placement of hooves and bandages).

In the ruminants vehicle a total of three students can attend with the veterinarian on each visit. The students accompany the ambulance service three days a week during the academic year, which makes the total number of visits above 100 a year.

Table 7.4: Number of cases seen by the Ambulatory (mobile clinics) in the past three years.

	Species	Number of patients			Average
		2007	**2006**	**2005**	
Food-producing animals	Cattle	236	-	-	**85.33**
	small ruminants	-	-	-	
	pigs	-	-	-	
	other farm animals	-	19	1	
Poultry (no of flocks)		-	-	-	**-**
Rabbits (no production) units)		-	-	-	**-**
Equine		1758	561	406	**908.33**
Other		-	-	-	**-**

7.1.8.2 OTHER ON FARM SERVICES AND OUTSIDE TEACHING

Other than having an on duty Ambulatory (Mobile) clinic, a Faculty may have defined contracts with farms or other institutions to allow for an outside teaching and patient care. Similarly, a Faculty may provide herd-health services.

Please indicate if and to what extent this applies to your Faculty.

Parasitic Diseases

The ***Parasitic Diseases Unit*** carries out practical clinics on the farms. The most important aspect of these visits is to bring the students closer to the reality of parasitic diseases, and to be able to interpret the epidemiological context and discuss the most effective methods of control according to each farm. Also, the *Parasitical Diseases Unit* has around 20 small ruminants (goats and sheeps) which are used for teaching and research activities and which are held in the Experimental Farm of the Cabildo.

Table 7.1.8.2.1. Food Animals treated by the Parasitical Diseases Unit.

Species	2007	2006	2005	*Average*
Small ruminants	1603	2477	1606	**1895**
Porcine	1096	1231	1108	**1145**
Rabbits	1594	2078	1594	**1755**

Table 7.1.8.2.2. Number of visits to farms or herds by the Parasitical Diseases Unit.

Species	2007	2006	2005	*Average*
Small ruminants	13	18	13	**14.6**
Porcine	13	15	13	**13.6**
Rabbits	13	13	13	**13.0**

Specifically, the *Parasitical Diseases Unit* visits the following farms:

SMALL RUMINANTS

Name of Farm/Owner	Location	Principal Farming	Approximate Census
Caprican	Valsequillo	Intensive Exploitation of Goats	800 reproductive goats
Ganadería el Draguillo. Juan Perera Santana	Montaña Arena	Semi-Intensive Exploitation of Goats	1500 goats and 50 sheep
Tomás Rocha	Caserones.	Semi-Intensive Exploitation of Goats	500 reproductive goats and 50 adult sheep
Carmelo Melián	Los Arenales	Intensive Exploitation of Goats	300 reproductive goats
Carlos Suárez	Las Vegas	Intensive Exploitation of Goats	50 goats and some cows
Sonia María Suárez del Pino	Las Romeras	Semi-Intensive Exploitation of Goats	100 reproductive goats and sheep
Roque Mendoza Cruz	Llanos de la Botija	Intensive Exploitation of Goats	750 reproductive goats
Alejandro B. Rodríguez Rivero	Valleseco	Traditional Exploitation System	10-20 goats, 30-60 sheep
Antonio Mejías	El Salobre	Semi-Intensive Exploitation of Goats	300 reproductive goats and 100 reproductive sheep
Enrique Herrera Sánchez	La Breña	Intensive Exploitation of Goats and Sheep	300 reproductive goats and 400 reproductive sheep

PIGS

Name of Farm/Owner	Location	Principal Farming	Approximate Census
Restaurante Balcón de Zamora	Zamora	Intensive Exploitation of Pigs	140 pigs
Pedro Torres Moreno	Camping de Temisas	Intensive Exploitation of Pigs	80 reproductive pigs
José Herrera	Cuatro Puertas	Intensive Exploitation of Pigs	150 reproductive pigs
Manuel González	Cueva del Gato	Intensive Exploitation of Pigs	165 reproductive pigs
Desiderio Vega	La Culata	Intensive Exploitation of Pigs	95 reproductive pigs
Santiago Pulido	Barranco de las Madres	Intensive Exploitation of Pigs	80 reproductive pigs
Rayco Ravero	Juan Grande	Intensive Exploitation of Pigs	50 reproductive pigs
Francisco Romero	Sta Lucía	Intensive Exploitation of Pigs	100 reproductive pigs

RABBITS

Name of Farm/Owner	Location	Principal Farming	Approximate Census
Cunícula Tamarán/Miguel López		Intensive Exploitation of Rabbits	400 reproductive rabbits
Juan Manuel Marrero	Los Chorros	Intensive Exploitation of Rabbits	10,000 animals

RABBITS

Name of Farm/Owner	Location	Principal Farming	Approximate Census
Orosmán	Fataga	Queen Bee cultivation	25-30 hives

Reproduction

In the installations of the Faculty, the *Reproduction Unit* can use the goats of the Faculty Farm to carry out practicals. In 2007, around 130 female and 8 male goats were used. With regard to practicals with rabbits, 12 reproductive females and two stud males were used. Reproduction also uses cows (currently four) from the Cabildo, and which are housed in the VTH from April to June.

With regard to animals outside the facilities of the Faculty, Reproduction visits the Osorio Farm (owned by the Cabildo de Gran Canaria) and which gives access to the following animals:

- Cattle farm: 6-8 studs and 3-4 cows.
- Pig farm: 4 sows and one breeding pig.
- Sheep Farm: around 20 sheep and two rams.
- Bee Farm: Handling and reproduction of bees, with access to various hives.

Infectious Diseases

The *Infectious Diseases Unit* carries out a series of field visits which last 4.5 hours in order to have first hand knowledge of how to control the real problems on farms or large collectives.

Table 7.1.8.2.2. Number of visits to farms by the Infectious Diseases Unit

Specie	2007	2006	2005	Average
Goats	13	15	12	**13.3**
Sheep	2	3	3	**2.6**
Pigs	15	15	15	**15**
Poultry	15	15	15	**15**

Specifically, the *Infectious Diseases Unit* visits the following farms:

Name of Farm/Owner	Location	Principal Farming	Approximate Census
Maria del Carmen Domínguez Santana	Balcón de Zamora (Valleseco)	Intensive exploitation of pigs	25 sows 2 studs and 150 pigs for fattening
Juan Benito Rivero Rodríguez	La Casilla (Valleseco)	Intensive exploitation of sheep	70 ewes, 4-5 rams y 30 lambs
Roque Pérez Díaz	El Pascualillo nº 6. (Valleseco)	Intensive exploitation of goats	17 goats
Explotación Avícola San José del Alamo	El parrillar (San José del Alamo)	Intensive exploitation of poultry	60,000 animals.

7.1.9 OTHER INFORMATION

Indicate any notable additional outside sources of material for clinical training purposes, such as animal charities, animals awaiting slaughter, etc. Indicate how the level of clinical service that is offered by the Faculty (in small companion animals, equines and production animals) compares with outside practices in terms of facilities, hours of service, equipment, expertise, responsiveness, etc.

Provide an indication in percentage terms of the proportion of cases that are primary (i.e. first opinion), and referrals (provide a breakdown by species, if helpful). If the Faculty has a particular aim or policy as regards this mix, describe it.

Indicate what areas of clinical specialisation are covered, and the extent of the coverage (for example, a veterinarian with a particular specialisation may see patients in the clinic for one day a week, 3 afternoons, etc.).

Indicate the relationship the Faculty has with outside practitioners (in small companion animals, equines and production animals) in terms of matters such as referral work, providing diagnostic or advisory services for private practitioners, practitioners participating in teaching, holiday or 'seeing practice' work for students, feedback on the level of clinical training. Describe (if applicable) any other relationships with outside organisations that are routinely used to provide students with training (in particular practical training) in other clinical subjects (e.g. pathology work, interaction with state veterinary work).

In clinical subjects, animals which come for consultation to the VTH are used, and in some cases, such as in practicals of *Surgery*, cadavers from the Island Animal Sanctuary are used.

The caseload is compiled of the following sources: referred cases, cases which come from within the ULPGC community, cases which come from protective societies and non-profit organisations and cases which have previously been attended on the historical list.

In 2005 an agreement was signed between the Cabildo of Gran Canaria, the ULPGC and the FULP to develop a joint plan of action in with regard to the Veterinary Teaching Hospital.

The referred animals come from veterinary clinics needing the services which the hospital offers. There is a referral document which is defined in the referral protocol, the product of a previously written agreement, and which is available to all veterinarians in paper format through the Official Veterinary College of Las Palmas, and electronically through the VTH, Veterinary Faculty and Official Veterinary College websites. The honorary professionals who are applied are the honoraries which the Official Veterinary College publishes annually.

The VTH attends first consultancy patients from within the University community which includes staff (teaching staff and administration and service staff) from both the ULPGC and the FULP, as well as all the students. To incentivise the caseload which comes from this sector, the hospital applies 20% discount to the professional honoraries of the Official Veterinary College.

There are specific collaboration agreements between the VTH and various protective societies to whom clinical services are offered. One of these agreements allows for medical-surgical attention to be given to animals that come from the Island Animal Sanctuary, which are sterilised as part of the protocol of the programme of adoption. The costs of these activities are financed in part by the Official Veterinary College.

The highlighted Clinical Services offered are:

- **Ophthalmology Service**. This is the first Ophthalmology Service in the Canary Islands and currently has a long history of referral cases. Nowadays there are other services of Veterinary Ophthalmology, although our service is the only one which offers services such as Electro-retinographs.

- **Dermatology Service.** This is also a service with a long history of referral cases. This is the only service which offers services like the Intradermic Test.
- **Reproduction and Neo-natology Service**. This service offers 24 hour attention to help at births, caesareans, as well as neo-natal intensive care. It also offers specialised services of assisted reproduction.
- **Internal Medicine Service.** We offer a specialised Internal Medicine Service, with analysis of gases, hormonal analysis, and in particular diagnostic support through complementary tests such as ecographs, endoscopies, etc.
- **Hospitalisation and Intensive Care Service.** This service has been in operation since 2007 and is the only service of its type in the north of Gran Canaria.

The VTH facilities are used by the Continuing Training Programmes. The Veterinary College Organisation often uses these facilities to organise and hold practical workshops in the classrooms and operating theatres. At the same time, the collective of doctors also uses our facilities, for example, through specialised training courses in laparoscopic surgery using pigs.

With regard to clinical assistance, during the last few years there has been an important increase in the caseload of both large and small animals.

In the case of ruminants, the caseload increase can be explained by the contracting of the cattle veterinary surgeon which took place in 2007, which corrected one of the major deficiencies which we had in relation to this service.

In the Equine Clinic the increase in case load is due mainly to the incorporation of a teacher in the ambulatory service.

In the case of small animals, in the last three years there has been an important increase in the hospital's caseload, as well as a change in the type of cases received. The percentage of referral patients and first opinion cases has increased, whilst at the same time the number of patients received from the Animal Sanctuary and Protective Societies has fallen slightly. Therefore in 2005, 60% of the small animal patients came from charity, however in the years since then the number of first opinion and referral patients has increased which has reduced to 42%(2006) and to 37% in 2007.

Table 7.1.9.1. Evolution of the type of patients treated in the VTH during the last three years.

	2007	2006	2005
Referrals	12%	3%	2%
First Opinion	50%	55%	38%
Charity	38%	42%	60%

In section 7.1.5.1. the specialist clinical services and their timetables are shown.

Provide an outline of the administrative system(s) used for the patients, *e.g.* in terms of how case records are kept, how data are retrieved, whether systems are centralised, etc.

On arrival of the patients at the VTH reception, a clinical history is opened which all details of the patient and the owner are recorded. The type of patient (referral, University community or protected societies) is specified.

The patients go through to consultation where students take part in the case, collecting information of amanuensis and clinical history, examining the patients and producing a diagnostic plan which is collected on a computer file (QVET). All the analytical results, images and documents are included in the clinical history of the QVET. Every time a patient comes to the hospital, a new visit is made in its clinical history. This programme allows reports in pdf format to be printed off, noting the date and including images, so that a report can be given to the owners of the referred patients, as well as sending a report by e-mail to the referring veterinarian.

There are nine computers in the hospital connected to the network which share a database and can access all information.

A security copy is kept of the database periodically. Some hardcopies of documents are kept in files, together with the analytical results, radiographs, electrocardiograms, and some reports.

7.1.10 RATIOS

See the section *'Main Indicators'* in **Annex Ia** for the figures needed for calculating ratios. Give the figures for numerators and denominators. The ratios should then be expressed by taking the numerator as 1.

Table 7.5: Animals available for clinical training (in the clinics of the Faculty or seen through the Ambulatory clinic) as ratio to the number of students in last full year of clinical training

R11:	no. of students graduating annually [a] / no. of food producing animals seen at the Faculty	=	56 / 49.33	=	1 / 0.88
R12:	no. of students graduating annually [a] / no. of individual food animal consultations outside the Faculty [2] [3]	=	56 / 85.33*	=	1 / 1.52*
R13:	no. of students graduating annually [a] / no. of herd health visits [3] [4]	=	56 / 101.1	=	1 / 1.80*
R14:	no. of students graduating annually [a] / no. of equine cases [1]	=	56 / 52	=	1 / 0.93
R15:	no. of students graduating annually [a] / no. of poultry/rabbit cases [1]	=	56 / 20.33	=	1 / 0.36
R16:	no. of students graduating annually [a] / no. of companion animals [1] seen at Faculty	=	56 / 2535.66	=	1 / 45.28
R17:	no. of students graduating annually [a] / Poultry (flocks)/rabbits [2] [3] (production units) seen	=	56 / 3	=	1 / 0.05

[a] see Annex I, 2.2.b;

[1] Table 7.3, average;

[2] Table 7.4, average;

[3] where applicable use or add information provided in chapter 7.1.8.2;

[4] see 7.1.8.1

* **Only animals visited by the mobile clinic of the VTH are included**.

Table 7.6: Animals available for necropsy

R18:	no. of students graduating annually [a] / no. of necropsies food producing animal + equines	=	56 / 205.9	=	1 / 3.67
R19:	no. of students graduating annually [a] / no. of poultry / rabbits [1]	=	56 / 186.9	=	1 / 3.33
R20:	no. of students graduating annually [a] / necropsies companion animals [1]	=	56 / 432.9	=	1 / 7.73

[a] see Annex I, 2.2.b;

[1] Table 7.3, average;

[2] Table 7.4, average;

[3] where applicable use or add information provided in chapter 7.1.8.2;

[4] see 7.1.8.1

7.1.11 OTHER SPECIES

Indicate how the Faculty deals with fish and other food producing species.

In the subjects *Fish Culture* (2nd year) and *Ictiopathology* (5th year), students visit the Canarian Institute of Marine Sciences, a body which belongs to the Canarian Canarian Government, which is in Taliarte (Telde), as well as the Young Fish and Bream Farm (ADSA) which is in Castillo del Romeral (San Bartolomé de Tirajana).

Fish

In the subject *Fish Culture*, during the practicals students learn about the different sections of the process of fish production. Firstly, the students prepare and maintain a stock of live food (rotifers) to be used in the initial stages of the larval phase of the different species of fish that are studied. At the same time they evaluate the quality of the spawning and follow the process of the development of the larvae. When the fish are born they are involved in marking them by means of a microchip. And at the end of the fattening they take samples of various batches to determine the corresponding productive index.

In the subject *Ictiopathology*, in the Young Fish and Bream Farm (ADSA), there are approximately 1.5 million animals of all ages. The students, in 14 different groups, carry out a general inspection of the different batches and in the case of there being pathologies, are responsible for the administration of medication (antibiotics or antiparasites) to the batches. Students also carry out vaccinations (by bath or by intraperitoneal) and taking samples of sick animals for laboratorial diagnosis.

Moluscs and Crustaceans

In the subject *Fish Culture*, during the practicals students carry out induction tests and evaluate them.

7.2 COMMENTS

Feel free to comment on all data provided in this Chapter.

Comment on major developments in the clinical services, now and in the near future.

Comment on local conditions or circumstances that might influence the ratios in tables 7.5 and 7.6.

During the last three years an important change has taken place in the case load of the Veterinary Teaching Hospital. This change has been due to various factors, among which should be highlighted the signing of an collaboration agreement between the Official Veterinary College of Las Palmas, the ULPGC, the FULP and the Island Animal Sanctuary. Through this agreement, the Official Veterinary College makes an annual economic contribution which covers part of the costs of the medical-surgical costs of the animals in the sanctuary at the Veterinary Teaching Hospital.

We would like to highlight the fact that, thanks to this agreement, in 2007 the medical-surgical unit at the VTH carried out a monthly average of treatment of 65 animals which came from those housed at the sanctuary, principally activities of sterilisation and castration in which students can take an active part.

The agreement has also allowed the clinical attention service to be expanded to cover all members of the University community, without the necessity of obtaining a referral document which is essential for members of the general public. The agreement has therefore expanded the clinical services to a wider part of society, which providing competition to private clinics. This mechanism has brought a considerable increase in caseload in all specialities and services.

We can conclude that after a number of years of this agreement in operation without any complaints being made against it by any party that it has been satisfactory and has allowed one of the principal objectives of the Veterinary Teaching Hospital to be fulfilled, which was none other than to satisfy the basic clinical training needs of degree students.

The Clinical Service of the VTH has been operating 24 hours a day for two years now, as until then there was only an emergency telephone number. Currently the VTH is open 24 hours to attend emergencies and hospitalisation services.

With regard to the **R11** ratio, on the number of food-production animals seen in the Faculty, this can be explained for a variety of reasons:

- The transportation of ruminants from the farms to the Faculty faces significant difficulties due to the restrictions on movement of livestock established in current legislation on animal health.
- The majority of pathologies of ruminants can be adequately treated on the farm itself, which makes the farmers reluctant to allow the animals to be brought to the Faculty for treatment.
- The facilities do not permit the comfortable and safe unloading of bovines, whilst at the same time we do not have sufficient facilities for the hospitalisation of animals, which would allow an adequate flow of patients.

With regard to the **R14** ratio, the number of horses attended at the facilities of the VTH is scarce due principally to the difficulties for the accommodation of horses in the VTH, and so clients do not want their horses to be housed at the hospital. Animals which need continuous treatment are seen to on their own farms. Thus, we have attempted to reduce this deficiency in the VTH through the introduction of the ambulatory clinic for horses which carries out important activities with students on the farms themselves. Therefore, a big effort has been done for increasing the number of horses available for the students, because the total census of horses in Gran Canaria is 1,591, and during 2007 a total of 1,758 cases have been seen at the Equine Ambulatory Clinic.

7.3 SUGGESTIONS

If the ratios in tables 7.5 and 7.6 for your Faculty do not fall into the category "satisfactory" according to the indicative table in **Annex I**, what can be done to improve these ratios?

From the beginning of the academic year 2007-2008 we have tried to increase the number of ruminants which are attended to in VTH itself, through a collaboration agreement with various small ruminants farms. This agreement is based on the free treatment of sick animals in the VTH's facilities, and the farmers' association covers the cost of medicine and clinical material. This has allowed us to increase the number of small ruminants attended to in the Faculty.

To be able to increase the number of cows attended to in the VTH a renovation of the facilities of the hospital has been proposed which would allow for the housing of more bovines as well as an animal unloading bay.

With regard to the treatment of horses in the VTH itself, there is a project for the creation of a riding area which would improve the acre of hospitalised animals, as well as a project to extend and improve the facilities to increase the housing capacity.

CHAPTER VIII

Library and Learning Resources

8.1 FACTUAL INFORMATION

8.1.1 LIBRARY AND OTHER INFORMATION TECHNOLOGY SERVICES

Give a general description of the library/ libraries of the Faculty/University that are available to students. Indicate how the library/libraries are managed (e.g. library committee).

The Library of the University of Las Palmas de Gran Canaria (BULPGC) is one functional unit with a single management and technical co-ordination, and is integrated by centralised technical services, the General Library and thematic libraries. The Library of the Veterinary Faculty is part of these and depends organically and functionally of the Director of the BULPGC.
The Library of the Veterinary Faculty occupies a total area of 550 m^2, divided into the following sections:

- 225 m^2: General Reading Room.
- 225 m^2: Storeroom, Computers Room and Staff working area.
- 50 m^2: Periodicals Room.

There is a Library Committee which is in charge of collecting, analysing and resolving the proposals and suggestions of the Veterinary Faculty, Departments and users to those who work in the library, within the policies and rules established by the ruling bodies.

The budget of the Library is provided by the own BULPGC, although there is a contribution from the Official Veterinary College of Las Palmas, resulting from a signed agreement:

- Library of the Veterinary Faculty: 54,670 €
- Official veterinary College: 3,000 €

Access to the library is free for all members of the ULPGC and the Official Veterinary College of Las Palmas. The BULPGC also allows Canarian people access to its archives and to its loaning service, the requirements of which are to be of adult age, and to be in possession of a reading card issued by the library.

For each major library of the Faculty, please provide the following information, either in narrative or tabular form.

Main Library

Is this specific to the veterinary training establishment?	YES	
Is this common to two or more establishment?	NO	
Full time equivalents of part time employees	2 grant holders	
Number of full-time employees	3	
Number of journals received each year as hard copies	106	
Number of full access Electronic journals	About 1200	
Availabilities for online literature search	YES	
Availability of textbooks	YES	
Number of student reading places	139	
Library opening hours	weekdays	weekends
• During term-time	12 h (8:30-20:30	closed
• During vacations	5 h (9:00-14:00)	closed

Indicate how the facilities are used by students:
A lending service is available to the students, with the possibility of renewing loans and reserving books by internet. In 2007 10,207 loans were issued

The Library of the University of Las Palmas de Gran Canaria (BULPGC) has at the disposition of its users a loan service of lap-top computers to be used inside the Faculty, with the possibility of making home loans at weekends. In 2007 3, 238 lap-top loans were made.

With regard to the library archive, it has, on 31 December 2007, a total of 11,556 documents. The library stocks may be consulted on-line in the catalogue of the BULPGC (http://opac.ulpgc.es/), which is integrated in the collected catalogue of the Spanish University Libraries Network (*Red de Bibliotecas Universitarias de España, REBIUN*). Monographs, periodical publications and any other document available can also be consulted. There are also monthly alert bulletins for the monographs.

Users can have access from any computer in the Faculty or from home to the electronic resources portal of the BULPGC, MetaLib (http://metalib.ulpgc.es/), which includes: data bases, e-magazines, e-books, theses, patents, regulations, e-prints, library catalogues, web resources, encyclopaedias and e-dictionaries, press, official bulletins, etc. This portal also offers access to 536,922 e-books as support to teaching and research.

The available platforms are:

- **LiOn** (approximately 350,000 titles)
- **ECCO** (approximately 150,000 titles)
- **EBBO** (approximately 125,000 titles)
- **E-libro** (approximately 58,000 titles, which includes **veterinary titles**)
- **Clásicos Tavera** (approximately 700 titles)
- **Safari Books on line Technology and Business** (approximately 350 titles)
- **Myilibrary** (5 titles)

In addition to all those information sources, users may also consult the on-line catalogue with the list of books recommended by teachers for the different subjects:

http://opac.ulpgc.es/cgi-bin/abnetopac/O7048/ID4da88ea8/NT1?ACC=255

The library has available a free access computer room for users, with a total of ten computers and a scanner. These computers and the software are updated regularly (at least once a year). A self-service photocopying facility is also available. Both the library and the study room are WiFi areas as is the rest of the Faculty.

The library organises at the beginning of each year training sessions on the services available to new students, integrated into the "welcome days", although throughout the year various courses are organised, both basic and advanced. They are all publicised on the webpage of the BULPGC and on the Virtual Campus.

Subsidiary libraries of the Faculty

There are none

8.2 COMMENTS

Please comment on the adequacy of the books and accessible journals, of the opening hours and the provision of reading spaces and support personnel.

The Library stocks are specialised in Veterinary Science, Agriculture, Animal Production, and Food Technology and Hygiene. In general terms, it can be said that the collection is adequate, thanks to its annual renewal.

The acquisition policy is based on the basic bibliography recommended to teachers on their teaching projects, on specific requests made by teachers, and on the bibliographical lists put forward by the Veterinary Library Committee. Since the teaching staff intervenes directly in selection, the content of the collection is adapted to teaching needs. In the cases of the basic bibliography, there are a minimum of five copies of each title, as opposed to the minimum recommendation of two.

With regard to the periodic publications of the BULPGC, a re-organisation of subscriptions takes place every four years, which is when new subscriptions can be added. In addition to the journals subscribed to by the Faculty Library, the BULPGC makes available to the University community the complete text of 21,911 electronic journals through Metalib.

The BULPGC has a Document Access Service which locates and retrieves documents not found in the library archives of the University, as well as lending documents to other institutions which request them.

The Library opening hours are established by the BULPGC Central Services, depending on the academic calendar. This timetable in general covers the students' needs, although many users request extended opening hours at weekends. It is currently impossible to satisfy demand due to a lack of staff. The study room is open every day from 8:00 to 24:00 and other libraries in ULPGC are open 24 hours.

Considering the number of potential users, the number of reading positions is insufficient. This is especially obvious at exam times. Users have also requested group study rooms, which we currently do not have. The BULPGC is taking measures in various libraries to move towards the "Resource Centre for Learning and Research" model (CRAI), which involves adapting space and equipment.

With regard to staff, there are currently a total of 94 people at BULPGC distributed as follows:

Veterinary Faculty	3
Archive, Libraries and Museum Assistants	32
Manager	1
Manager Assistants	4
Library Technical Specialists	37
Library Officials	12
Service Assistants	5

The Veterinary Library has only three workers, one Archive and Library Assistant and two Library Assistant Technicians, which is insufficient, given user demand.

Please comment on the Faculty's provision of IT-facilities and the approach to self-learning, and on the further developments in this area

The virtual Campus of ULPGC is an alternative which allows access to higher education through open and flexible courses which take advantage of the opportunities that Information Technology provides.

In the same way, traditional teaching can also benefit from Information Technology. Students, as well as having classroom contact with teachers and colleagues, have at their disposal a virtual world of teaching and learning which improves the quality of their education.

To offer this, the Virtual Campus of the ULPGC has three basic services:

TeleTraining

The ULPGC offers non-contact teaching/distance learning at all educational levels. In this way, by internet, official courses, doctorate programmes, postgraduate qualifications (Master's degrees and University expert), elective subjects, University extension courses and specialist courses of continuous training can all be offered.

Classroom Teaching

Face to face classes which are taught at the ULPGC have at their disposition a teletraining platform through which they can contact teachers, ask questions, send coursework, and receive back grades, etc. The Veterinary library is also in the Virtual Campus, extending its functions and services through information technology and communication. In this way students and teachers have another communication and training tool as a complement to the traditional use of the library, not only with a link in the webpage of the BULPGC, but also by answering on-line queries about its services, and announcing interesting news (training courses, updates to the webpage, etc.).

Collaborative Work

The same platform functions as a collaborative work tool, allowing different groups or teams within the University community to develop a variety of projects together (management, research, training, social, etc) without needing to be physically present, or at least reducing the need.

8.3 SUGGESTIONS

In general the Library services are highly valued by its users. The Veterinary Library has a number of weak points which need to be improved:

- The budget of the Library has been frozen for the last five years. Last year, due to the fact that many periodicals were bought with the general budget of the BULPGC, more books have been purchased, but even so, this is insufficient.
- Library space is becoming increasingly scarce, and a redistribution of space needs to be studied. The same is true of the study room, in order to make room for group study. A study to see whether the library could be converted into a CRAI (*Resource Centre for Learning and Research*) would be useful, which is the tendency of the organisation policy of the BULPGC.
- With regard to staff, it currently needs to be increased on both shifts, and more so if the intention is to convert the library into a CRAI.
- The University Library gives teachers and researchers access to the institutional Repository, where documentation produced by the ULPGC can be consulted: Doctoral theses, dissertation projects, records, research articles, expositions, offprints, etc., given that is ever more important to **spread this production in its full text and in open access** to contribute to scientific development, as well as the promotion of the authors. As it is voluntary, it is necessary to spread this resource between teachers and researchers in the Veterinary Faculty, with the aim of allowing their scientific production to be consulted by everyone interested.
- Finally, although the Faculty Library is integrated into the Virtual Campus, all the possibilities of this medium of communication between students and teachers have not yet been fully exploited.

CHAPTER IX

Student Admission and Enrolment

9.1. UNDERGRADUATE COURSES

9.1.1. UNDERGRADUATE STUDENT NUMBERS

Table 9.1. Undergraduate student composition (academic year 2007/08)

Total number of undergraduate students	482
Total number of male students	141
Total number of female students	341
Foreign students:	
-from EU countries	1
-from non-EU countries	1

Minimum number of years (MNY) allowed to successfully pass the curriculum: not legally established.

9.1.2 STUDENT ADMISSION

State the minimum admission requirements.

Indicate whether there is a limit to the number of students admitted each year.

Describe how the number of government-funded student places is determined.

Outline any selection process (or criteria) used in addition to the minimum admission requirements.

Describe whether students applying for and/or starting veterinary training have an equal or very variable knowledge base in scientific disciplines from their previous studies.

Describe any circumstances under which extra students may be admitted to the undergraduate veterinary course.

Outline any changes foreseen in the number of students admitted annually. If applicable, describe how the Faculty plans to adjust to these changes.

Minimum Admission Requirements

The Spanish Education System comprises the following stages:

- **Primary education** (compulsory, lasting six years; usually 6-12 years of age).

- **Secondary education** (compulsory, lasting four years; usually 12-16 years of age).

- **Baccalaureate** (non compulsory, two years; usually 16-18 years of age).

  Depending on their preferences and future study plans, Baccalaureate students can choose between four different options:

  - Arts
  - Life and Health Sciences
  - Humanities and Social Sciences
  - Technology

  There are two sub-options within the Life and Health Sciences baccalaureate: Scientific-Technical and Health Sciences. Those students wishing to take a degree in Veterinary Science must choose the Health Sciences sub-option within the Life and Health Sciences option.

- **Higher Education** (University degree)

  Admission requirements for starting University Studies are established by the Ministry of Education and Science and the Autonomous Government of the Canary Islands. To access University studies at the ULPGC, the student, having completed the Baccalaureate, must pass the University Access Test (PAU, *Prueba de Acceso a la Universidad*) of the ULPGC. There is no additional test to enter the Veterinary Faculty. Foreign students who request permission to enrol in the veterinary curriculum at our Faculty must have previously passed in their Faculty a sufficient number of credits to allow a minimum of 60 credits to be convalidated into our Faculty. Exceptionally, when the number of requests for places is less than the number of places on offer to foreign students, the minimum asked for is 15 credits.

Access to Veterinary Studies at the ULPGC is regulated by a *numerus clausus* system. According to the pre-approved number of students to be admitted (72 in 2007/08) and to the number of students requesting admission, a certain cut-off line is established. The students' access mark is calculated using the average from their Baccalaureate average mark (60 % of the final mark) and their University Access Test mark (40 %). The mark required to enter our Faculty was 6.55 (on a scale from 0 to 10) for the academic year 2007/08.

As there are always more students with top grades applying than places available, the admission of undergraduate students in our Faculty is very competitive (see Table 9.2).

Limit to the Number of Students Admitted each Year

There is a limited student intake. The number is decided finally by the University Co-ordination Committee of the Ministry of Education and Science.

Determination of the Number of Government-funded Student Places

Since the ULPGC is a Public University, the fees that our students have to pay are not very high (950 €/year on average). Even so, the Education Protection Act (19th July 1994, BOE 21st July) sets out indirect financial aid or *free tuition* under certain circumstances:

- **Outstanding marks**. In the Spanish grading system (0-10), the highest possible mark is a 10 or the so-called *Matrícula de Honor* (MH). For each MH obtained, in the next academic year the student will be able to enrol for free in the same number of credits as the ones for which he got the MH mark. In addition, students with an average grade of MH during Baccalaureate have free tuition during their first year of University studies.
- **Beneficiaries of a programme for large families** can have reduced or waived public fees for university studies, according to the rating with categories of families. Large families (with 3-4 children) have a 50 % discount. Especially large families (5 children or more) receive a 100% discount.
- **State-funded scholars.** Students can receive a grant from the Spanish Government or the Canarian Autonomous Community, to pay their University fees (RD 2298/1983 28th July, article 3.1). The grants are given according to the student's family income and the academic records. Orphaned children of Civil Servants also get free tuition.

The Statutes of the ULPGC also establish that staff and the children of staff of the ULPGC do not have to pay tuition fees.

Selection Criteria and Process Used in Addition to the Minimum Admission Requirements

Applications from successful candidates who have passed the PAU in June, or in previous years, will be processed first. Then, applications are taken from successful candidates who passed the PAU in September (the latter is usually non-applicable since the available places are generally filled in June).

There is a percentage of offered places reserved for students with special situations:

- **Students with disabilities:** 3% of places are reserved for this group. They must present an official disability certificate issued by the Social Services Institute (*IMSERSO*) or the Canarian Autonomous Community, giving a disability rating of 33% or higher.
- **Gifted athletes:** 1% of places are reserved for this group. They must attach a certificate justifying their status issued by the National Sports Institute (*Consejo Superior de Deportes*).
- **Graduates in other University Studies:** 1 % of places are reserved for this group.
- **Foreign students:** 1 % of places are reserved for students from countries outside the EU. To be admitted, they must have passed the University Entrance test in the current or preceding year, by means of the Spanish Distance Learning University (*Universidad Nacional de Educación a Distancia, UNED*).
- **Students older than 25:** 3 %. Special PAU exams have been developed to allow them another opportunity to carry out their University studies.
- **Professional Training:** 10 % of places are reserved for students who have passed the training cycle at higher grade of Management and Organisation of Farming Companies (*Gestión y Organización de Empresas Agropecuarias)*.

Comparative Level of Knowledge in Scientific Disciplines of Students Applying for or Starting Veterinary Training from Studies at School.

Prospective students must take the Health Sciences option for Baccalaureate (as stated in the Organic Law 1/1990 dated 3rd October, LOGSE). Compulsory subjects in the health Sciences option are *Biology* and *Chemistry*; thus, *Mathematics* and *Physics* are electives and may not have been taken.

Students tend to avoid these subjects in favour of others, thought to be easier, in order to obtain higher marks and achieve a better grade point average in their academic record. This can cause problems in the first year of the Veterinary degree, where Mathematics and Physics are core subjects.

Some Circumstances Under Which Extra Students May be Admitted to the Undergraduate Veterinary Course

Students of Veterinary Sciences in other Spanish or foreign Faculties can request a transfer of academic records. The request is made to the Dean of the Faculty, who is authorised by the Rector to accept or not, by taking into account the availability of places and the average mark in the candidate's academic record. This type of access to our Faculty includes nine to ten students/year.

We also regularly receive foreign students within official International Exchange Programmes. Our Faculty has Socrates/Erasmus agreements with 17 European Faculties of seven countries (8 outgoing students and 16 incoming students in the academic year 2007/08).

For the last two years the ULPGC has had its own exchange programme with Latin America. On this Latin American exchange programme during the year 2006/07 one outgoing student and one incoming student participated.

In addition our Faculty has Séneca/SICUE agreements with nine Spanish Veterinary Faculties (six outgoing students and 11 incoming students in the academic year 2007/08).

International exchange programmes students

Academic year	Incoming students	Outgoing students
2007/08	16	8
2006/07	19	11
2005/06	14	9

Agreements with European Veterinary Faculties

Université de Liege	Belgium
Université de Berne	Switzerland
Universität Zurich	Switzerland
Tierarztliche Hochschule Hannover	Germany
École Nationale Veterinaire d'Alfort	France
École Nationale Veterinaire de Toulouse	France
Universitá degli Studi di Bologna	Italy
Universitá di Messina	Italy
Universitá degli Studi di Milano	Italy
Universitá degli Studi di Napoli Federico II	Italy
Universitá degli Studi di Sassari	Italy
Universitá degli Studi di Teramo	Italy
Universitá degli Studi di Torino	Italy
Universitá degli Studi di Udine	Italy
Universidade Tecnica de Lisboa	Portugal
Universidade Tras Os Montes do Alto Douro	Portugal
Wroclaw University of Environmental and Life Sciences	Poland

Foreseen Changes in Annual Intake. Adjustment to These Changes

At the moment there are no plans to change the annual student intake. In fact, we are the Veterinary Faculty in Spain with the lowest intake of first year students.

Our Faculty Board would like to decrease slightly the number of admissions, to 60 per year. However it is going to be difficult to achieve this, since we have a very high demand. Moreover, our University and the Canarian Autonomous Community would probably not approve this reduction, as it would imply a decrease in their revenue derived from students' fees and increase cost per student.

Table 9.2. Intake of veterinary students in the past five years.

Year	Number applying for admission		Number admitted	
	1st option	2nd option	Standard intake	Other entry modes *
2007/08	638	294	72	9
2006/07	285	119	72	9
2005/06	258	118	72	10
2004/05	265	131	72	10
2003/04	252	114	72	9
Average	339.6	155.2	72	9.4

* Students from other Veterinary Faculties. They enter the Faculty by the Transfer of Academic Records system, and they all enter courses higher than the first year.

9.1.3. STUDENT FLOW

Table 9.3. establishes to what extend students make progress in their studies. To this end, we look at students who were admitted initially and which year they have reached after the minimum number of years (MNY).

Table 9.3. Student flow and total number of undergraduate veterinary students

	Number of students present after admitted year (2002/03)	Number of additionally admitted students
1st year	0	(2003/04): 80
2nd year	0	(2004/05): 82
3rd year	2	(2005/06): 83
4th year	9	(2006/07): 83
5th year	26	(2007/08): 83
6th year		
>6th year		
Number undergraduate students		**482**

Of the 72 students initially admitted in the year 2002/03, 25 students finished their studies and are currently graduated. Of the rest, two students are in their 3rd year, nine students are in their 4th year, and ten students are in their 5th year. Therefore ten students have left the Faculty either to transfer to other universities or have stopped studying.

As well as the students enrolled on the 2002/03 course who are continuing their studies (37), and the students who have been admitted in years since then (411), there are some students enrolled in our Faculty whose admission precedes 2002/03 (34), thus completing the 482 students currently enrolled

Table 9.4. Number of students graduating annually over the past five years

Year	Number graduating
2007/08	61
2006/07	66
2005/06	51
2004/05	57
2003/04	45
average	**56**

Table 9.5. Average duration of studies (distribution of students in years)

Duration of attendance	Number
4 years	-
5 years	25
6 years	17
7 years	11
8 years	8
> 9 years	5
Average duration of studies of the students who graduated in year 2006/07	7.33

Describe the requirements (in terms of completing subjects and examinations) for progression to a subsequent year of the course.

Describe the academic circumstances under which the Faculty would oblige students to leave the course.

Requirements for progressing to a subsequent year of the course

Our Veterinary Degree comprises five years, divided in two cycles:

- First cycle: 1st and 2nd year of the degree.
- Second cycle: 3rd, 4th and 5th year of the degree.

In general, there are no official limitations for passing from one year to the next, nor for passing from the first cycle to the second cycle. There are limitations on enrolling in the core subjects *Pre-professional Training I* and *Pre-professional Training II* according to the RD 1497/1981 in which it is regulated that to carry out studies in an external entity, students must have obtained more than 50 % of the credits for their degree.

Academic circumstances under which the Faculty would oblige students to leave the course

First year students who have not passed any core subject in the two ordinary sittings available in that academic year, will not be able to continue their studies in this Faculty. In addition, students who have unsuccessfully used up all the possible sittings for one subject (maximum of six) will have to leave our Faculty. In the cases of all six of these sittings being used there is the possibility of asking the Rector for a 'grace' sitting.

9.2. COMMENTS

Comment on standard of the students starting the course.

Comment on the ability of the Faculty to satisfactorily decide the number of students it can accept.

Comment on the factors that determine the number of students admitted.

Comment on the adequacy of the facilities and teaching program to train the existing number of students.

Comment on the progress made by students in their studies, and the Faculty's ability to ensure that satisfactory progress is maintained.

Comment on the percentage of students that will eventually graduate.

Comments on standard of the students starting the course

In general, students entering the first year have outstanding secondary school academic records. The access mark is medium-high for the ULPGC. Moreover, the percentage of students enrolled in the first-year of this Faculty who choose Veterinary Science as their first option for University study is very high; thus, the level of motivation of our students tends to be elevated.

Year	2003/04	2004/05	2005/06	2006/07	2007/08
Minimum mark required to enter the Faculty	6.50	6.02	6.47	6.63	6.55
Students average access mark	7.40	7.08	7.24	7.28	7.34
Students upper 20 % access mark	14	27	17	10	13

Comments on the ability of the Faculty to satisfactorily decide the number of students it can accept

The Faculty Board proposes the number of places, which must be approved by the ULPGC Government Council and also by the University Co-ordination Committee of the Ministry of Science and Innovation (formerly name Ministry of Education and Science) which has the final decision.

Comments on the factors that determine the number of students admitted

We try to adapt our student intake to the availability of human and material resources and means. The ULPGC also takes into account the demand for Veterinary graduates in the labour market.

Comments on the adequacy of the facilities and teaching program to train the existing number of students

The low number of students admitted each year allows small practical groups to be maintained, with quality teaching in which the individual student carries out the practice and is not limited to merely observing the teacher. Nevertheless, maintaining small groups brings with it a lot of work on the teacher's part, so that we consider that the teaching staff, especially in some lacking areas should be increased.

Comments on the progress made by students in their studies, and the Faculty's ability to ensure that satisfactory progress is maintained

The Teaching Affairs Committee (CAD) undertakes evaluation and monitoring of the teaching/learning process. Its meetings (which always include students) improve our perception of the situation and the adequacy of students' progress. It is also possible to analyse the latter through teachers' personal tutorials.

Comments on the percentage of students that will eventually graduate

The number of graduate students has remained more or less stable along the last 5 years (average: 56 per year). An increase in the number of graduates from our Faculty is not expected in the next years, due to the present student intake limitations.

Analysing the distribution by gender, there has been a notable increase in the number of women graduates in our Faculty, reflecting the increased number of female students in the Faculty in recent years.

	Graduate Students	
	Male	**Female**
2006/07	19 (28.78 %)	47 (71.21 %)
2005/06	23 (45.08 %)	28 (54.90 %)
2004/05	25 (43.85 %)	32 (56.15 %)
2003/04	18 (40 %)	27 (60 %)

We consider that the yearly number of graduates from all Veterinary Faculties in Spain (approx. 1,100 in 2003) is too high for the demand of Veterinary surgeons in Spanish society. However, a recent representative study for the evaluation of employment of Veterinary graduates in Spain, shows that the percentage of unemployment within Veterinarians is insignificant (less than 5 %) and that more than 75% of Veterinary graduates find a job within six months of graduation. However, this study also shows a high rate of job instability.

In the Canary Islands, the crisis in the farming sector (already worse than in other Autonomous Regions), the low average age of vets currently practising in the Canary Islands (36 years old) and other factors make it difficult for our graduates to join the job market. Therefore, studies in collaboration with the Official Veterinary College of Las Palmas have begun with the intention of convincing the relevant authorities to reduce the number of places offered to 60.

9. 3. SUGGESTIONS

If you are not satisfied with the situation, please state in order of importance any suggestions that you may have concerning this Chapter if you feel unhappy about:
- The number of students admitted;
- The drop-out percentage;
- The average duration of studies;
- Other aspects.

Student Intake

We have been able to achieve acceptable numbers and this allows for good training with small groups for practical sessions (a maximum of five students per cilinical practices; a maximum of eight to ten students per laboratory practices). However, a slight reduction in intake would be better, mainly if there is not an increase in the academic staff.

The most important thing is not to be obliged in the future by the Ministry of Science and Innovation to increase the number of places to compensate for the reduction in student numbers seen in other degrees, as a direct consequence of the current fall in population in Spain.

Drop-out percentage

The drop-out in our Faculty is 3 %. A substantial number of off-course students do not enrol in any subject for a span of time (1-2 years), and then enrol again in order to continue their studies. Most of these students are working and sometimes find it difficult to attend to their academic duties.

Average duration of studies

The average duration of studies is too long. Our students have a good academic level (evidenced by the final average mark of graduate students, 6.9), but the current curriculum is usually considered to have a heavy workload, which makes it difficult to finish the degree in five years. Our students have to be trained in 4,150 hours which means 830 hours per academic year. This is the reason why the Spanish Conference of Veterinary Faculty Deans asked the Government authorities to increase the duration of our degree to 5.5 years. In the process of adaptation to the ESHE that our Faculty is gradually carrying out and in which the new methodology of ECTS credits is being introduced in the first two years of the degree, a reduction in teaching time would be a major handicap (especially in theoretical classes, with the aim of maintaining high quality practical classes).

Another circumstance that causes the average length of studies to be drawn out over time is the ULPGC policy that allows students to repeat enrolment in any one given subject an infinite number of times. The students only have 6 retakes for each subject; however, they can be enrolled without sitting the final exams and if they are not physically present, then these sittings do not count as a retake.

Another point that contributes to both a heavy workload and to the reason why students take longer to finish is the absence of important limitations for progressing on to the subsequent year. This situation makes it possible for the students to be enrolled in many subjects from different years of the degree. Obviously, this can lead to an excessive workload, as well as making it very difficult to attend all the programmed lectures or practical classes due to timetable clashes.

Level of knowledge on admission

We consider the problem of Mathematics and Physics described in section 9.2.D to be quite important. We think that both of these subjects should be obligatory for all Baccalaureate students in the Health Sciences option. The ULPGC is trying to solve this problem by offering so-called “Zero” subjects. They are special courses taught before the beginning of the regular classes in the first year of the degree. However, during the present 2007/08 academic year, only one Zero course of Chemistry was offered.

Moving from one year to the next

The lack of a legal limit on the maximum number of subjects that a student can be enrolled in, and the lack of requirements to move from one course to the next or from one year to the next creates the following problems:

a. A number of students are enrolled in an excessive number of subjects, being unable to perform satisfactorily in all of them.
b. A number of students are enrolled in subjects of different years. Although the programme of an academic year is published before the process of enrolment begins, and therefore the student should check the timetable and possible clashes, in practise the student enrol themselves anyway and then encounter difficulties because of the clash of their academic programmes.

In studies carried out by the Spanish Conference of Veterinary Faculty Deans leading to the development of common criteria for new study programmes, limits on the number of credits for which a student can be enrolled in one year (60) have been introduced, as well as restrictions on moving from one year to the next.

CHAPTER X

Academic and Support Staff

10.1 FACTUAL INFORMATION

Table 10.1. Personnel in the establishment provided for veterinary training

	Budgeted posts (FTE)		Non-budgeted posts (FTE)		Total (FTE)	
1. Academic staff	VS	NVS	VS	NVS	VS	NVS
Teaching staff (total FTE)	54.41	20.93	-	-	54.41	20.93
Research staff (total FTE) [1]	-	-	18	4	18	4
Others (FTE)	-	-	-	-	-	-
Total FTE	54.41	20.93	18	4	72.41	24.93
Total FTE (VS +NVS)	75.34		22		97.34	
FTE providing last year teaching	74.7		6		80.7	
2. Support staff						
a) responsible for the care and treatment of animals	7 [2]		-		7	
b) responsible for the preparation of practical and clinical teaching	12.9 [3]		-		12.9	
c) responsible for administration, general services, maintenance, etc	41.64 [4]		-		41.64	
d) engaged in research work	-		6		6	
e) others (VTH)	9 [5]				9	
Total support staff	70.54		6		76.54	
3. Total staff	145.88		28		173.88	

[1] 10 PhD students performing also teaching activities and 12 contracted research staff. There are also 7 PhD students without teaching workload not included in this table.

[2] 5 FTE in the Faculty and 2 FTE in the VTH

[3] 12.4 in the Faculty and 0.5 FTE in the VTH

[4] 30.15 FTE in the Faculty, 4 FTE in the VTH, and 7.49 FTE in the ULPGC Centralised Services (apportioned according to the number of students, academic staff, and number of centres with respect to the whole ULPGC)

[5] 5 FTE veterinarian interns and 4 contracted veterinarian acting as support staff for clinical teaching

Table 10.2. Allocation of academic (veterinary and non veterinary surgeon) teaching staff (expressed as FTE) and support staff to the various departments.

Department name	Academic teaching staff								Support staff (see table 10.1)		
	CU		TU/CEU/TEU		PCD/PAD		PA		Tech. (b+d+e)	Animal carers (a)	Adm (c)
	VS	NVS	VS	NVS	VS	NVS	VS	NVS			
Biology	-	1	-	2.18	-	0.31	-	-	-	-	0.27
Physics	-	-	-	0.71	-	-	-	-	-	-	0.03
Mathematics	-	-	-	0.60	-	-	-	-	-	-	0.04
Chemistry	-	-	-	1	-	-	-	-	-	-	0.05
Modern Languages	-	-	-	0.20	-	-	-	-	-	-	0.02
Biochemistry, Molecular Biology, Genetics and Immunology	-	-	-	2.63	-	2	-	0.5	-	-	0.47
Toxicology, Pharmacology and Microbiology	-	1	1.91	4.8	-	-	-	-	0.4	-	0.17
Morphology	2	-	6	-	3		1	-	5	-	1.1
Animal Pathology, Animal Production, Bromatology and Food Technology	5	-	25	3	5	1	5.5	-	12	5	2
VTH	-	-	-	-	-	-	-	-	9.5	2	4
Centralised Services ULPGC	-	-	-	-	-	-	-	-	-	-	7.49

CU: Full professor, civil servant (tenured post), full time

TU/CEU/TEU: professor, civil servant (tenured post), full time

PCD/PAD: contracted PhD holding professor, permanent hired position, full time

PA: associated teacher, hired position (full time and/or part time)

Table 10.3. Ratios students/staff.

R1:	number total academic FTE in veterinary training [3] / number undergraduate veterinary studens [2]	=	75.34 / 482	=	1 / 6.39
R2:	number of total FTE at Faculty [3] / number undergraduate studentes at Faculty [1]	=	not applicable		
R3:	number total VS FTE in veterinary training / number undergraduate veterinary students	=	54.41 / 482	=	1 / 8.85
R4:	number total VS FTE in veterinary training / number students graduating annually	=	54.41 / 56	=	1 / 1.02
R5:	number total FTE academic staff in veterinary training / number total FTE support staff in veterinary training	=	75.34 / 76.54	=	1 / 1.01

2) Table 9.3

3) Table 10.1

Outline how the allocation of staff to the Faculty is determined.

Outline how the allocation of staff to the departments (or other units) within the Faculty is determined.

Teaching staff

The departments have the right to request new academic positions and hire teaching staff. There are two types of academic staff: tenured and hired, each one recruited in a different way. In both cases, the funding comes from the ULPGC and the Canarian Autonomous Government. At the present time, the University teaching staff is regulated by the LOU (6/2001 and 4/2007), as well as by the regulations of the Canarian Autonomous Government and the ULPGC Statutes.

Staff needs are determined by the departments themselves, who present the request for posts (incorporating a positive inform from the Dean of the Faculty) to the Vice-Rector of Teaching Staff of the ULPGC. Applications for increased or replacement staffing are approved or rejected by the University depending on the availability of sufficient funding in the budget and to the staff needs calculated by the Vice-Rector of Teaching Affairs for each Department according to the so-called ULPGC Teaching Capacity in the Different Areas of Knowledge. This document establishes the need for academic staff based on the number of students, teaching credits, number of practical groups, and type of practical teaching of each Area of Knowledge. There is also a Contract-Programme between the ULPGC and the Canary Government with a biannual plan with establishes a previously agreed growth percentage.

If the request is approved by the Rector and refers to Civil Servants posts for Professors (CU, TU), the Rector will transfer the request to the General Secretary of the University Co-ordination Committee, and the post is advertised and the selection process carried out according to the national accreditation process (as laid down in the LOU). Candidates have to be approved by a national committee according to their teaching and research merits, according to strict quality criteria previously published.

When posts for contracted teachers are involved, the Rector carries out the recruitment and appointment process as per the regulations set out in the LOU and by the Canarian Autonomous Government. The selection is carried out through Hiring Committees, composed by the Vice-Rector of Teaching Staff, the Dean, the Head of the Department, two members of the ULPGC Government Board, and one student belonging to the Department.

Support Staff

The number and distribution of the support staff are decisions made directly by the Rector and depend on the needs of each Faculty and department. In this case there also two types of support staff: Civil servants and contracted positions. In both cases, their financing, recruitment, and hiring depends on the University. Members of the management of the Faculty and/or departments participate in the Hiring Committees. There are also a growing (albeit slowly) number of support staff involved in research, whose funding and activity is related to different types of research contracts and projects and who are paid with private funds or public research funds.

Indicate whether there are difficulties in recruiting or retaining staff.

Describe (if appropriate) any relevant trends or changes in staff levels or the ability to fill vacancies over the past decade.

Indicate whether it is straightforward to employ additional staff from service income (e.g. from revenues of clinical or diagnostic work).

Currently it is very difficult to increase the number of teachers (tenured and/or hired positions) due to the Contract-Programme with the Canarian Autonomous Government. New positions are conceded based mainly on the Teaching Capacity in the different Areas of Knowledge. One of the problems stems from the fact that the Department's perception of their teaching needs does not always coincide with that of the Rector and the Contract-Programme.

One aspect we consider to be positive is the high level of competence observed in contracting new staff, resulting in the better preparation of candidates. In the case of permanent posts, candidates have to previous pass at national level demanding and competitive criteria. In the case of non-permanent staff, the definition of clear and precise criteria by contracting committees and the current high level of competence have led to the recruitment of better prepared staff.

However, still pending in our University is the establishment of a "Teaching Career" which allows the teacher to have guaranteed stability and promotion prospects in line with pre-established criteria according to teaching quality and scientific merits.

Concerning staff employment from Service Income, the VTH has the capacity to contract clinical, support and administrative staff charged to its budget. The VTH budget includes payments to five internships for Veterinary graduates and four Contracted Veterinarians. The contracting system does not follow the same regulations and procedures as the rest of the general competitive processes for contracting administrative and support staff in the ULPGC. This system has important limitations:

- the selection of staff, including veterinarians is carried out directly by the FULP; usually they do not take into account the specific needs of the Veterinary Faculty and normally the clinical staff do not take part in the selection process (except in some cases where they are required to act as assessors in the selection tests, but in a non decision-making capacity).
- The system has the advantage of the capacity for quick action.

There is more independence when contracting staff with funding from research projects or in collaboration with companies, since in these cases the advertisement and recruitment for the position is carried out by the Project Co-ordinator.

Describe the regulations outside work, including consultation and private practice, by staff working at the establishment.

Describe the possibilities and financial provisions for the academic staff to:

a) attend scientific meetings
b) go on a sabbatical leave

Full time Teachers are not allowed to have another job outside the ULPGC (consultation or private practice), except in official institutions and with previous authorisation from the ULPGC (Law 53/1984, 26th December, which regulates incompatibilities of the personnel working in Public Administration). This law allows share participation up to a maximum of 10% of the capital of a company or society. Part time Teachers can hold outside jobs. The LOU education law and the statutes of the ULPGC recognise the possibility of contracts signed between teachers and other individuals, Universities, or public and private entities to carry out scientific work.

The ULPGC (Vice-Rector of Research, Development and Innovation) offers financial support to attend scientific meetings. The high number of applications in recent years has caused the University to limit to three (two international and one national) the number of annual grants that a teacher can receive. However, these grants are comparatively high when compared to other Spanish universities, covering travel costs, board and lodging, but not including enrolment costs. The applications are judged by a commission of the Vice-Rector of Research, Development and Innovation. Attendance at congresses is only financed when the applicant is speaking and/or posting. The maximum quantity allowed is different according to the

place of the congress (in Spain, a maximum of 300 €; in Europe, a maximum of 902 €; outside Europe, a maximum of 1202 €). Additional funds usually come from research grants, projects, contracts, clinical work, etc.

The Statutes of the ULPGC regulations about the sabbatical leave programme. Full-time Civil servant teachers and staff with indefinite contracts have the right to request a sabbatical year for every five years of uninterrupted service given to ULPGC. During this year they have the right to receive all monies corresponding to them. The aim of the sabbatical year has to be study, or the development of teaching activities and research in the area of speciality.

Leave for shorter periods of time are easier to obtain provided that all teaching duties are taken care of by the Department.

10.2 COMMENTS

Comment on the numbers of personnel in the various categories

Academic staff

The number and, more importantly, the category of positions have been improving steadily for the last nine years. In recent years, there has been a certain stabilisation of teaching staff which has had a positive effect on specialisation and dedication to teaching in the Faculty (75 % of which are civil servants).

However, as is reflected in the Teaching Record which the Dean compiles every year detailing the numbers of hours taught by each member of staff, the distribution of hours of the teachers in different areas of knowledge is very unequal. At the time when the University was growing and it was easier to obtain contracts for new teachers, the Faculty did not have a Teaching Record, and this allowed an unequal growth of staff in some areas. Nevertheless, currently the economic limitations of the ULPGC and the contract-programme make contracting new staff difficult, in spite of this tool to clearly illustrate real necessities. This teaching inequality generates certain problems of working relations, given that salaries are similar, but teaching loads are not.

The difficulties in contracting new teachers also negatively affects the motivation of recent graduates to begin a teaching or research career, preferring to opt for starting their professional career in the private sector.

Support staff

We consider that the number of support staff must be increased, especially in offering support for all teaching activities. Particularly problematic are situations in which a member of the support staff is off sick. The University does not usually send a substitute teacher for 15 days, which, added to the lack of staff, makes it tremendously difficult to carry out normal teaching activities.

Comment on the salary levels, specially those of academic staff in relation to the level of income in the private sector.

Currently, implementation of economic incentives from the Canarian Autonomous Government, has improved salary levels for academic staff. Merits concerning teaching quality, research quality, and participation in the University management are evaluated each 4-6 years by the Government. However, the teaching staff has asked for a larger increase and pay comparable with other workers in the Autonomous Community at the same administrative level, considering that the high qualifications required to obtain a University teaching post are not completely reflected in the financial rewards they receive.

With respect to the comparison of income levels in the private sector, this is variable, with great instability in the job market for new graduates being very noticeable in recent years. When compared to this unstable situation, the teaching salaries of the University staff are obviously clearly superior.

Comment on the percentage of veterinarians in the academic staff.

The percentage of Veterinarians in the Academic Staff (expressed as FTE) is 74.38%. The large majority of Academic Staff in the Departments of Morphology, and Animal Pathology, Animal Production, Food Science and Technology is comprised of veterinarians. However this percentage is extremely low in the Basic Sciences Department. The main reason for this is possibly that when the Veterinary Faculty was founded in 1987 it was done by staff who were at that time members of the Medicine Faculty of the University College, dependent on La Laguna University, where there were virtually no veterinarians, but mainly doctors and biologists.

10.3. SUGGESTIONS

The Veterinary Faculty considers it necessary that the Rector regularises the current situation of the four veterinarians contracted in the VTH through the FULP (two for small animals, one for horses and one for cattle). Currently these veterinarians, particularly those dedicated to horses and cattle carry out teaching activities related to the assistant activities they give to the VTH, but they do not have *Venia docendi.* This is due to the fact that currently a *Venia docendi* is only given to research scholars according to ULPGC's own rules. The University is aware of the situation of these contracted veterinarians, accepting that they do teach, but at the same time, advised by the legal department of ULPGC will not give them no the *Venia docendi*, believing that this recognition could oblige them to incorporate these contracted veterinarians as teaching staff.

Elsewhere, the Anatomopathological Diagnostic Service, belonging to the Department of Morphology considers that it needs specialised support staff to continue its services throughout the academic year.

CHAPTER XI

Continuing Education

11.1 FACTUAL INFORMATION

Please describe the role of the Faculty in providing continuing education.

In the Veterinary Faculty the Continuing Education takes place mainly through the postgraduate programmes (more detailed information can be found in Chapter 12).

The Faculty also collaborates with different Departments, professional colleges, NGOs associations, and companies to develop educational activities. The educational activities are directed towards continuous improvement in the profession and veterinary graduates as well as undergraduate take part.

Table 11.1.1 Courses Organised in the Faculty 2007 and 2008.

Title of the Course	Organised by	Duration	Date
I Curse of Sporting Dogs Handling.	Veterinary Faculty	20 hours	16 to 18 March 2007
Illegal Trafficking of Exotic Species in Canary Islands and CITES Regulations.	AVAFES	Conference	17 May 2007
Canarian Birds Linked to El Palmeral.	AVAFES	Conference	25 May 2007
Plan for Recuperation of the Egyptian Vulture (Guirre) of Fuerteventura. Preliminary Results.	AVAFES	Conference	8 June 2007
Alternative Therapies Course	Veterinary Faculty	20 hours	15 to 17 June 2007
Practical Workshop of Surgical Solutions in Pathologies of Knees in Dogs.	VTH and Official Veterinary College of Las Palmas	10 hours	13 - 14 July 2007
Physiology of Milk Ejection and Milk Removal in Cows, Goats. Prof. Dr. R. Bruckmaier (Berne, Switzerland).	Animal Production	Conference	28 September 2007
Radiological Interpretation Workshop	VTH and Official Veterinary College of Las Palmas	10 hours	5 October 2007
Morphofunctional Evaluation in the Selection of Reproducers in Spanish Pure Breed Horses (Andalucian Horse). Prof. Dr. E. Agüera (Córdoba).	Veterinary Faculty	Conference	15 October 2007
Sheep, Genes and Parasites: a Functional Genomics Approach". Prof. Dr. H. Raadsma (Sydney, Australia)	Parasitology	Conference	19 October 2007
Innovation Meeting in the Agricultural Science Sector.	Canarian Government	5 hours	19 November 2007
I Ruminant Medicine Course of Las Palmas de Gran Canaria	Ruminants Clinic	15 hours	16 - 17 November 2007
I Black Canarian Pig Course	Veterinary Faculty	10 hours	23 November 2007
The Silvopastoral System	Veterinary Faculty	Conference	23 November 2007
The Great Ape Project	AVAFES	Conference	20 December 2007
The Veterinary and Agribusinesses	Veterinary Faculty	Conference	18 January 2008
Basic Facts of Dog Handling and Control	Veterinary Faculty	10 hours	14 - 15 March 2008
Homeopathy: Then and Now of Alternative Therapy.	Pharmacology Unit	10 hours	4 - 5 April 2008
New Species, New Challenges for Veterinarians.	AVAFES	20 hours	28 - 29 March 2008
Veterinary Clinical Oncology	Veterinary Faculty	15 hours	6-7 June 2008

The University structures part of the continuing education through the University Extension Courses or through the University Foundation for the Continuing Education Centre. It is an educational programme open to the general public, although as they concern professional matters they are usually aimed towards veterinarians and veterinary students.

Table 11.1.2 University Extension Courses 2007-2008

Title of the Course	Organised by	Duration	Date
Ethnoveterinary in Food Sovereignty.	Animal Pathology, Animal Production, Bromatology and Food Technology Department	20 hours	27 – 28 October 2006
Clinical Oncology in Small Animals.	Animal Pathology, Animal Production, Bromatology and Food Technology Department	25 hours	26 February – 2 March 2007
Reptile Clinic	Animal Pathology, Animal Production, Bromatology and Food Technology Department	25 hours	12 - 16 March 2007
Environment and Health	Clinical Sciences Department	15 hours	26 - 30 March 2007
III Course on Camels in the Canaries: History, Handling and Illnesses.	Animal Pathology, Animal Production, Bromatology and Food Technology Department	20 hours	16 – 20 April 2007
Instrumental Techniques in a Clinical Research Laboratory	Clinical Sciences Department	20 hours	18-22 February 2008
VI Course of Analysis of Proteins and Nucleic Acids: Use of Cellular Lines of Mammals as an Experimental Biomedical Research Model.	Biochemistry and Molecular Biology, Physiology, Genetic and Immunology Department. Clinical Sciences Department	25 hours	29 February – 7 March 2008
Management and Organisation of a Small Animals Clinic in the 21st Century. Professional Veterinary Marketing	Animal Pathology, Animal Production, Bromatology and Food Technology Department	25 hours	3-8 March 2008
IV Course on Camels in the Canaries: History, Handling and Illnesses.	Animal Pathology, Animal Production, Bromatology and Food Technology Department	20 hours	24-28 March 2008
Laboratory of Chemical Analysis	Chemistry Department	32 hours	3-11 March 2008
Application of New Technologies in Biomedicine	Department of Signals and Communications	20 hours	12-16 May 2008

Table 11.1.3 Courses at the Continuing Education centre (Centro de Formación Contínua) taught by members of the Faculty 2007-2008

Title of the Course	Area	Duration	Date
Basic Contents and Food Control Skills for Work Placement in Industries of Obtaining and	Food Safety	20 hours	21-25 April 2008
Skills and Specific Training in Traditional Cheese Factories.	Food Safety	20 hours	25-29 March 2008
Instrumental Techniques in a Clinical research Laboratory.	Clinical Sciences	20 hours	24-28 March 2008

11.1.3 Intern Programme in the Hospital.

The Veterinary Teaching Hospital offers an intern programme. The internship offers a training programme, which includes the payment of a grant and is linked to the clinical services of the hospital. The internship is exclusively for graduates of the last two years. Every Tuesday important clinical training sessions take place in which the most relevant clinical cases from the previous week are presented.

There are currently four interns in small animals and one in horses. The internship lasted for three years until 2006 since when the internship programme has lasted one year, except the internship in horses which has stayed at three years.

11.2 COMMENTS

- Comment on the quality of the continuing education programmes in which the Faculty is involved.
- Comment on the degree of participation of veterinarians in the continuing education programmes in which the Faculty is involved.

The continuing education activities for profession veterinarians is not based in the Veterinary Faculty, as the good relationship that exists between the Official Veterinary College of Las Palmas allows the Faculty to collaborate with that organism in fulfilling some of its principal aims which are written it its statutes. Specifically article 6C of the Veterinary College Statutes establishes that one of the principal aims of the Veterinary College is:

c) The promotion, by all means within its reach, to constantly improve all scientific, cultural, economic and social levels of College members, to which effect can organise and maintain all type of cultural institutions and systems of prevision and social protection.

It is for this reason that there is, and there must be, a synergy with this Institution to jointly develop the continuing education activities, to ensure there is no competition between both institutions, but that they are complementary. We would therefore like to reassert that the Veterinary College can always rely on the installations of the VTH for all types of continuing education programmes which are of a clinical practical nature.

11.3. SUGGESTIONS

The lack of an organisation or unit in charge of the development of a continuing education programme which brings together all the educational activities for graduates makes it difficult to write this part of the document. The creation of such an organisational structure is proposed, which would improve co-ordination and offer a fuller adapted to the needs of veterinary surgeons.

CHAPTER XII

Postgraduate Education

12.1. FACTUAL INFORMATION

12.1.1. CLINICAL SPECIALITY TRAINING (INTERNS AND RESIDENTS)

Indicate whether students involved in this training receive a grant or salary.

Indicate any programmes that are certified by the European Board of Veterinary Specialisations.

Table 12.1.1. Clinical speciality training

Clinical discipline	Number interns	Number residents	Diploma or title anticipated
Rotating internship: Small Animal Medicine and Surgery	4		
Equine Medicine and Surgery Internship	1		
Veterinary Pathology		9	

The VTH offers a total of four internships in Small Animal Medicine and Surgery for veterinary graduates. These interns actively collaborate in all the clinical services of the VTH, namely *Surgery (Soft Tissue Surgery, Traumatology), Emergencies and Hospitalisation, Dermatology, Neurology, Exotic animals, Internal Medicine (Cardiology, Digestive, Endocrinology, Urology, Medical Oncology, Paediatrics, Othorhinolaryngology), Ophthalmology, Reproduction y Neonatology, and Laboratory.* They collaborate also in the 24 guard duties in the VTH Emergency Service. They are always under the supervision of senior clinicians. The candidates are selected for these positions based on their *Curriculum Vitae*. Interns acquire additional Postgraduate training by means of seminars, rounds, clinical sessions, etc. During this two-year period, the interns also receive a salary from the VTH.

The VTH has no European Diplomates. Thus currently no European Speciality Colleges Residency Programmes are underway.

The Pathology section of the Veterinary Morphology Department is recognised by the European College of Veterinary Pathology (ECVP) as a Registered Residency Training Centre. The objectives of this training programme are:

- To provide broadly-based theoretical and practical experience in veterinary pathology, orientated mainly towards domestic, exotic and/or laboratory animals.
- To promote high quality training in the discipline of veterinary pathology.
- To provide the trainee with the opportunity to pursue career goals in teaching, research, toxicological and diagnostic veterinary pathology.
- To meet the training requirements of ECVP Council for candidates to take the ECVP certifying examination.

The Veterinary Pathology Unit provides a sufficient number of cases of both surgical biopsies and necropsies (around 2,000 cases per year, with more than 25,000 archival cases), to provide the trainee with the opportunity to obtain experience in gross and histological findings and their interpretation. The training programme developed in our institution is also designed to encourage an original research project focus to obtain a PhD degree.

12.1.2. Research Education Programmes

Table 12.2. Number of research students enrolled in different programmes.

Type of degree	Full time	Part time	Duration
PhD			
Clinical and Therapeutic Investigation	34		2 years (200 + 120)
Animal Health	20 + 12		2 year
Aquaculture: Controlled Production of Aquatic Animals	21		2 year
Hygiene, Technology and Food Safety	19		2 year
Master			
Master's in Caprine Studies	5		120.16 ECTS credits

The Veterinary Faculty and the research groups integrated in the University Institute of Animal Health and Food Safety (IUSA) offer **four PhD programmes**.

PhD programmes include two main periods, followed by completion of the doctoral thesis:

1. ***Teaching Period.*** During this period students must take and pass 200 hours of theoretical and practical teaching in officially approved PhD courses. Afterwards, students can start the Research Period, during which they have to carry out 120 hours devoted to a particular research project, most frequently connected to and part of their doctoral thesis.

The final stage of this teaching period is an examination in a public session in front of a Specialist Committee. This committee evaluates the research work done, and, if appropriate, the student will receive the Diploma of Advanced Studies (DEA), which implies the recognition of Proficiency in Research.

2. Doctoral Thesis. The student has to carry out a wholly original research project, under the direction of a Faculty teacher (with PhD degree) or alternatively an external PhD. Once finished, the PhD thesis must be submitted for approval to the University PhD Studies Committee (*Comisión de Doctorado*) and it must also receive five positive evaluations from external and internal experts. After passing all these steps, the work must finally be presented and approved by a Commission of five specialists in a public session.

The PhD programme ***Clinical and Therapeutic Investigation*** achieved a "Quality Mention" by the Spanish Ministry of Education and Science after a positive evaluation by ANECA for 2004-2007 and 2008-2010. In the last four years, a total of 20 doctoral theses have been presented and approved from this PhD programme. An average of 34 PhD-holding teachers from the ULPGC and four PhD-holding teachers from other universities have participated annually as teachers on this programme, 90% of whom are veterinary surgeons.

PhD Programme Courses *Clinical Therapeutic Investigation*	Duration of training	Number enrolled	
		Learning period	Research period
	2 years	13	21
Exotic Animals Clinic	30 hours	8	-
Equine Clinic	30 hours	1	-
Small Animals Clinic	30 hours	9	-
Dermatology and Veterinary Haematology	30 hours	4	-
Camelid Clinic	30 hours	2	-
Clinical Importance of Toxic Residue in Food	30 hours	5	-
Importance of Intoxications in Daily Clinic	30 hours	7	-
Veterinary Therapeutics	30 hours	11	-
Surgery and Anesthesiology	30 hours	9	-
Intoxication by Plants, Seeds and Forage	30 hours	3	-
Identification and Development of New Cytotoxic Compounds	30 hours	3	-
Morphological Bases for TAC and MRI Applied to Clinical Diagnosis in Dogs	30 hours	7	-
Laboratory Animals: Care, Handling, and Pharmacological Techniques in Organs and Systems.	20 hours	10	-
Endoscopic Diagnosis and Treatment of Pathologies of the Digestive System.	10 hours	2	-
Experimental Design Models	10 hours	4	-
Research Methods in Veterinary Medicine	20 hours	11	-
Benefits and Risks of the Use of Antibiotics in Veterinary	10 hours	1	-
Legislation, Ethics, Sanitary Control and Experimental Design	20 hours	7	-
Livestock Residues	10 hours	2	-
Cardiology and Respiratory Medicine in Veterinary	120 hours	-	4
Veterinary Dermatology	120 hours	-	4
Pathology of Large Ruminants	120 hours	-	3
Veterinary Ophthalmology	120 hours	-	2

PhD Programme Courses *Clinical Therapeutic Investigation*	Duration of training	Number enrolled	
		Learning period	Research period
	2 years	13	21
Pathology of Nutrition in Small Animals	120 hours	-	1
Herpetopathology	120 hours	-	4
Applied Anatomy by Imaging Techniques in Animals	120 hours	-	1
Canine Prostatic Alterations	120 hours	-	1
Nutritive Evaluation of Food	120 hours	-	1

The PhD programme ***Animal Health*** achieved a "Quality Mention" by the Spanish MEC after a positive evaluation by ANECA for 2004-2011. In the last four years, a total number of 16 doctoral theses have been presented and approved from this PhD programme. An average of 25 PhD-holding teachers from the ULPGC and five PhD-holding teachers from other universities have participated annually as teachers on this programme, 80% of whom are veterinary surgeons.

PhD Programme Courses *Animal Health*	Duration of training	Number enrolled	
		Learning period	Research period
	2 years	20	12
Health of Exotic Animal Diseases	30 hours	11	-
Cetacean Health (Whales and Dolphins)	30 hours	11	-
Pig Livestock Health	30 hours	8	-
Aquaculture Health	30 hours	15	-
Animal Mycoplasmosis Health	30 hours	12	-
Reptile Health	30 hours	7	-
Environmental Chemistry and Veterinary Toxicopathology	40 hours	3	-
Veterinary Mycology	20 hours	1	-
Cytological Diagnosis and Applied Immunohistochemistry	30 hours	6	-
Methods of Isolation and Identification of Mycoplasmas and Ureaplasmas.	30 hours	3	-
Parasitical Infections and Immune Response	30 hours	16	-
Veterinary Bacteriology, Zoonosis and Environmental Microbiology	30 hours	10	-
Pathology of Reproduction in Domestic Animals	30 hours	15	-
Control of Infectious Diseases Through Transfer of Embryos	30 hours	11	-
Morphological Diagnosis of Lesions in Slaughterhouse Seizures	30 hours	7	-
Investigation in Pathology and Environmental Health of Cetaceans.	120 hours	-	4
Investigation in Animal Mycoplasmosis	120 hours	-	2
Comparative Veterinary Oncology	120 hours	-	1
Investigation in Animal Health in Aquaculture	120 hours	-	2
Sanitary Control Through Reproductive Technology	120 hours	-	1
Investigation in Parasitology	120 hours	-	1
Pathogens of Animal Mycoplasmosis	120 hours	-	1

The PhD programme ***Aquaculture: Controlled Production of Aquatic Animals*** achieved a "Quality Mention" by the Spanish MEC after a positive evaluation by ANECA for 2004-2011. In the last four years, a total number of six doctoral theses have been presented and approved from this PhD programme. An average of 12 PhD-holding teachers from the ULPGC and 11 PhD-holding teachers from other universities have participated annually as teachers on this programme, 20% of whom are veterinary surgeons.

PhD Programme Courses *Aquaculture: Controlled Production of Aquatic Animals*	Duration of training	Number enrolled	
		Learning period	Research period
	2 years	13	12
Financial Evaluation of Aquaculture Projects	30 hours	5	-
Digestion, Absorption and Transport of Lipids in Fish	30 hours	9	-
Marine Biota Associated with Artificial Reefs	30 hours	3	-
Evolution of Larval Development in Marine Fish	30 hours	4	-
Bacterial Diseases	30 hours	7	-
Sources of Alternative Protein to Fish Flour	30 hours	7	-
Financial Evaluation of Aquaculture Projects	30 hours	5	-
Digestion, Absorption and Transport of Lipids in Fish	30 hours	9	-
Marine Biota Associated with Artificial Reefs	30 hours	3	-
Evolution of Larval Development in Marine Fish	30 hours	4	-
Bacterial Diseases	30 hours	7	-
Sources of Alternative Protein to Fish Flour	30 hours	7	-
Sources of Alternative Lipids to Fish Oil in Aquaculture Diet.	30 hours	5	-
Food in Aquaculture	30 hours	9	-
Methodology of Microsatellites in Genetic Improvements	10 hours	2	-
Histology Techniques for Larva	10 hours	3	-
Quality of Aquatic Products: Techniques of Sensorial and Instrumental Analysis	10 hours	6	-
Research Planning	10 hours	8	-
Aquaculture and the Environment	30 hours	4	-
New Species for Aquaculture	10 hours	7	-
Cultivation of Corals in Aquariology	10 hours	3	-
Reproduction Control with Special Emphasis of Precocity of Cultivable Species.	10 hours	3	-
Nutrition in Aquaculture	120 hours	-	4
Cultivation of species in Aquaculture	120 hours	-	6
Quality of Aquatic Products	120 hours	-	1
Stress in Intensive Rearing of Fish	120 hours	-	1

The PhD programme ***Hygiene, Food Technology and Food Safety*** is taught by 15 PhD-holding teachers from the ULPGC and 4 PhD-holding teachers from other universities have participated annually as teachers on this programme, 84% of whom are veterinary surgeons. In the last four years, one doctoral thesis has been presented and approved from this PhD programme.

PhD Programme Courses *Hygiene, Food Technology and Food Safety*	Duration of training	Number enrolled	
		Learning period	Research period
	2 years	10	9
Auto-Control Hygiene-Sanitary Systems in Feeding Establishments	30 hours	10	-
Antecedents and Current Bases of Food Safety	30 hours	7	-
Traditional Food: Canarian Cheese and Gofio. Hygiene Aspects	30 hours	6	-
Basic Hygiene Operations in Feeding Establishments	30 hours	10	-
Updating and Development of Legislation on Food	30 hours	10	-
Production and Global Commercialisation of Food	30 hours	3	-
Veterinary Bacteriology and Environmental Microbiology	30 hours	8	-
Experimental Design Models	10 hours	11	-
Basic Laboratory in Clinical Analysis: Reliability of Results	20 hours	3	-
Use of Internet Resources for Food Control	20 hours	5	-
Parasitic Zoonosis and Parasitic Control of Waters	40 hours	7	-
Applied Research in the Auto-Control Systems of EARC	60 hours	-	9
Applied Research for the Study of Native and Traditional Foods	60 hours	-	9

The ***Master's in Caprine Studies*** was recently offered by the Animal Pathology, Animal Production, Bromatology and Food Technology Department for the 2006/07 and 2007/08 years and its main aim is to make possible specific integrated training in the goat species, covering all aspects, pathology, production, reproduction, selection, nutrition and products. In the master's programme 23 PhD-holding teachers from the ULPGC and 29 PhD-holding teachers from other universities have participated as teachers on this programme, 75% of whom are veterinary surgeons.

Master Programme Courses *Master´s in Caprine Studies*	Duration of training
	2 years
First Year	ECTS credits
Goats and Science	0.07
International Panorama of Goat Livestock	0.07
Goat Breeds	2.16
Pasture of Cattle. Impact Evaluation	2.16
Nutrition in Intensive Systems	2.16
Energetic Necessities	2.16
Pasture in Protected Areas	2.16
Nutrition in Intensive Systems; Relation Between Feeding and Product Quality	2.16
Udder Pathology	2.16
Lentivirus of Goat Livestock	2.16
Metabolic Pathology of Goat Livestock	2.16
Infectious Pathology of Goat Livestock	2.16
Mycoplasmosis of Goat Livestock	2.16
Pathological Anatomy of Goat Livestock	2.16
Parasitic Diseases in Goats	2.16
Electronic Identification in Goats	2.16
Production and Handling of Forage	2.16
Exploitation Systems	2.16

Master Programme Courses *Master´s in Caprine Studies*	Duration of training 2 years
First Year	ECTS credits
Sustainable Management of the Countryside	2.16
Economics and management of Exploitation	2.16
The Housing of Goats. Characteristics of Construction, Size, Design and Legislation.	2.16
Physiology of Lactation	2.16
Intensive Production of Forage Watered with Purified Water	2.16
Mechanical Milking of Goat Livestock	2.16
Physiology of Reproduction	2.16
Conservation of Goat Breeds	2.16
Selection of Goat Livestock	2.16
Reproduction Technology	2.16
Canal Quality in Goat Livestock	4.32
Meat Quality in Goat Livestock	4.32
Cheese and Lactose Products	2.16
Hygiene and Inspection of Goat Products	2.16
Artificial Lactation of Young Goats	2.16
Immunology of Young Goats	2.16
Second year	
Lactose Products of Goat's Milk-1	2.16
Lactose Products of Goat's Milk -2	2.16
Mechanical Milking	2.16
Seminal Technology	2.16
Artificial Insemination	2.16
Transfer of Embryos	2.16
Canal and Meat Quality	2.16
Immunity of New-Born Goats	2.16
Infectious Diseases	2.16
Parasitical Diseases	2.16
Sensorial Analysis of Cheese	2.16
Identification and Morphological Evaluation	2.16
Evaluation of Forage and Subproducts	2.16
Molecular Genetics Applied to Goat Production (I)	2.16
Molecular Genetics Applied to Goat Production (II)	2.16
Technical-Economic Management of Goat Exploitation. IT applications.	2.16
Master's Thesis	12

Finally it is necessary to point out that nine teachers of the Faculty teach on the ***Aquaculture International Master's*** organised by the International Centre for Higher Agronomic Studies of the Mediterranean CIHEAM (*Centro Internacional de Altos Estudios Agronómicos del Mediterráneo*), the ULPGC and the Canarian Institute of Marine Sciences. So far five courses have been completed. The Master's lasts for two years; the first year consists of theoretical and practical teaching, and the second year is devoted to the Master's thesis. The number of students is around 20, with half the places for students from non-European Mediterranean countries with a percentage of Ibero-American students.

12.2. COMMENTS

Comment on the number of postgraduate diplomas/titles awarded annually.

Comment on the percentage of veterinarians participating in postgraduate research training.

Whilst a high percentage of students enrolled on doctorate programmes (85%) obtain the Diploma of Advanced Studies (*Diploma de Estudios Avanzados*), the percentage of students who present a doctoral thesis is notably lower (32 %). Traditionally the PhD Degree has merely been a formative stage in the long line of requirements necessary to undertake a career in University teaching. The current difficulties to begin a teaching and research career, given the lack of teaching contract possibilities, and the lack of recognition of the doctoral title in the professional sector are doubtless the reasons why graduate students do not opt to take approximately four years to write their doctoral thesis. Moreover, the possibilities for students to successfully complete Postgraduate Studies are highly dependent on whether they are able to obtain adequate funding or not.

12.3. SUGGESTIONS

We consider it necessary that the VTH should include European Diplomates, with the aim of being able to offer certified residential programmes to the European Board of Veterinary Specialisations. To achieve this, it is necessary to prioritise within the budget provisions for staff, the high cost that contracting this figure would mean.

When planning the criteria for contracting staff in clinical areas the European Diploma qualification should be highly valued. At the same time, the ULPGC should also establish mechanisms of academic recognition and incentives to motivate the staff responsible to obtain this European Diploma.

Although the Veterinary Faculty is relatively highly placed compared to other ULPGC Faculties in terms of postgraduate education, an increase in research funds in terms of grants would be necessary for the production of doctoral theses.

CHAPTER XIII

Research

The details requested under this heading relate only to research experience offered to students during their undergraduate training, for example through project work.

13.1 FACTUAL INFORMATION

Indicate the involvement of undergraduate students in research, including the time spent, percentage of students involved and outcome required.

As a general rule, not all the students are involved in research.

The reading of a Graduating Dissertation (*Tesina de Licenciatura*) is optional and can be one of the goals for the involvement of the undergraduate students in research. The Graduating Dissertation is an experimental introduction to research, which should be original and unpublished, whose subject should be linked to one or more areas of knowledge which are taught at the Veterinary Faculty. The management of the thesis falls on one or more PhD-holding teachers who teach in the Faculty or who have taught at least the previous year. In the case of not fulfilling this last prerequisite, it should be guaranteed by a doctor who teaches in the Faculty who will act as tutor.

The participation of the students in research activities can be through two different channels:

- **Intern Student Collaborator.** The different research groups invite students to participate in research activities or in different services.

- Through **Collaboration Grants.** This access channel is a completely regulated system, and for a number of hours a week the student takes part in research activities. This scholarship programme is financed by the Ministry of Science and Innovation or by the university itself. The student given a grant receives economic compensation which depends on their dedication to the activity. Before awarding a grant, it must have been offered previously by the department or centre, given that the research group must pay for part of the value of the grant.

In the year 2007-2008 the total of students who participated in research activities in different groups linked to the Veterinary Faculty were:

Research Group	Number of Students	Estimated time spend	Developed activities
Environmental and Health Investigation Group (GIMAS)	1 (Erasmus)	120 hours	Determination of organochlorine pesticides and PCBs in sea turtles' blood from the Mediterranean Sea
Herpetopathology: Lines of Research: Pathologies and causes of mortality in stranded sea turtles. Pathology of reptiles in captivity.	5	20 hours	Necropsies
Unit of Cetacean Research, Division of Histology and Veterinary Pathology, University Institute of Animal Health and Food Safety	2	240 and 360 hours respectively	Updating of database and tissue bank, support in carrying out necropsies and writing reports of anatomopathological diagnosis of stranded cetaceans.
Rural Environment, Animal Production and Agronomic and Health Aspects	1	12 hours weekly	Determination of the concentration of seric and calostrum immunoglobulins
Veterinary Medicine and Environmental Pathology	2	250 hours	Dirofilariosis
Pathological Anatomy	1	200 hours	Characterisation de lesions pneumonic lesions in pigs and productive parameters.
Animal Reproduction	3	5 hours/week	New techniques of birth induction in goat species. Cryoconservation of semen in small ruminants.
	4	3-6 hours/ week	Cryoconservation of semen in canine specie. Artificial insemination with frozen semen.

13.2. COMMENTS

Comment on the opportunities for students to participate in active research work.

Although Research is the major resource for teaching information, the research activities usually are not developed with the undergraduate students; therefore, the majority of the research activity carried out at our Faculty is not included in this document. For further information you can visit the Research Memorandum at the ULPGC Website:

http://www.ulpgc.es/index.php?pagina=memoriainvestigacion&ver=buscad2

On the other hand, students find difficulties to carry out tasks which are not included in the syllabus as a result of the considerable study load which forces them to spend almost all their available time attending theoretical and practical classes and in personal study to pass their exams.

13.3 SUGGESTIONS

Will students be given more opportunity to participate in research activities?
If so, how will this be done?

As stated before, academic obligations are so demanding that it can be hard for students to see research as a priority.

One of the major opportunities to students to participate in research activities is the Graduating Dissertation. Since 2006, in order to stimulate these activities, an annual Special Prize to the better Graduating Dissertation has been granted by the Faculty. A specific regulation has been approved by the Faculty Board.

In addition, the fellowship policy does not depend on Faculty Board; therefore, to increase student's opportunity to participate in research activities a general strategic plan from the University, the Canarian Government or the Spanish Ministry Science and Innovation must be implemented.

ACRONIMES

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ACECAU: Canarian Agency for University Quality Assurance
ANECA: Spanish Agency for Quality Assurance and Accreditation
BOC: Oficial Bulletin of the Canarian Autonomous Community
BOE: Official Spanish Bulletin
BULPGC: Library of the University of Las Palmas de Gran Canaria
CAD: Teaching Affairs Committee
CPIRA: Exchange Programme and Academic Recognition Committee
ESHE: European Space for Higher Education
FULP: Canarian University Foundation of Las Palmas
HACCP: Hazard Analysis and Critical Control Points
IUSA: University Institute of Animal Health and Food Safety
LOU: University Organic Law
MCI: Spanish Ministry of Science and Innovation
OHAPA: Food Hygiene and Food Safety Office
PIF: Border Point of Inspection
PIGRU: Integrated Programme of Waste Management at the ULPGC
RD: Royal Decree
RPU: Radiological Protection Unit
SWOT: Strengths, Weaknesses, Opportunities, Threats
ULPGC: University of Las Palmas de Gran Canaria
VTH: Veterinary Teaching Hospital