



## ANNEX X

### Objectives and Competences of the Veterinary Degree



UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA  
Facultad de Veterinaria





## OBJECTIVES OF THE VETERINARY CURRICULUM

The general objective of the Veterinary Degree offered by the University of Las Palmas de Gran Canaria is training in the field of the Veterinary Sciences providing students with the knowledge, skills and attitudes on which the activities of the Veterinary profession are based. Also, the Degree provides the progressive acceptance of the responsibility inherent in the autonomous exercise of the Veterinary profession.

The objectives are summarized in training in the development of knowledge and professional skills to ensure the health of animals and humans through the following:

1. adequate knowledge of the sciences on which the activities of the veterinary surgeon are based;
2. adequate knowledge of the structure and functions of healthy animals, of their husbandry, reproduction and hygiene in general, as well as their feeding, including the technology involved in the manufacture and preservation of foodstuffs corresponding to their needs;
3. adequate knowledge of the behaviour and protection of animals and animal welfare as well as the improvement of its productions;
4. adequate knowledge in relation to the obtaining, in optimal and economically profitable conditions, of products of animal origin and the assessment of their environmental impact;
5. adequate knowledge of the causes, nature, course, effects, diagnosis and treatment, prevention and control of animal diseases, whether considered individually or in groups, including a special knowledge of the diseases which may be transmitted to humans (zoonoses);
6. adequate knowledge of preventive medicine;
7. adequate knowledge of the hygiene and the technology involved in the production, manufacture and putting into circulation of animal foodstuffs or foodstuffs of animal origin intended for human consumption;
8. adequate knowledge of the laws, regulations and administrative provisions in all areas of the veterinary profession and public health, understanding the ethical implications of health in a changing global context;
9. adequate clinical and other practical experience under appropriate supervision;
10. development of professional practice with respect to other health professionals, acquiring skills related to teamwork, with the efficient use of resources and in quality management;
11. identification of emerging risks in all areas of the veterinary profession.

These objectives are in accordance with the Regulations included in:

- *Procedure 2002/0061/COD COM (2002) 119: Proposal for a Directive of the European Parliament and of the Council on the recognition of professional qualifications related to the Veterinary Profession (ANNEX V.4)*
- *Directive 2005/36/EC of the European Parliament and of the Council of 7 September*





*2005 on the recognition of professional qualifications,*

- *The Spanish Law 44/2003 on the Regulation of health professions (BOE 22 November 2003),*
- *the Framework Document agreed by the Federation of European Veterinarians (FVE / 00/011),*
- *the Spanish ORDER ECI / 333/2008, of 13 February, which establishes the requirements for the verification of the official university qualifications that qualify for the exercise of the veterinary profession.*

For the drafting of the competences, the previous regulations have been considered, as well as the list of basic competences that must be guaranteed, in the case of the Degree, and those listed in the MECES (Spanish Framework of Qualifications for Higher Education):

- A. Possessing and understanding the knowledge in an area of study that departs from the baseis of general secondary education and usually is found at a level that includes some aspects that imply knowledge coming from the vanguard of its field of study.
- B. Knowing how to apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the elaboration and defence of arguments and problem solving within their area of study.
- C. Having the ability to gather and interpret relevant data, usually within their area of study, and to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.
- D. Being able to transmit information, ideas, problems and solutions to a public audience, in both specialized and non-specialized contexts.
- E. Developing the necessary learning skills to be able to undertake subsequent studies with a high degree of autonomy.

We have defined the following competences:





## **Nuclear Competences**

*Common to all the University of Las Palmas de Gran Canaria.*

N1 – The ability to communicate in an appropriate and respectful way with different audiences (clients, collaborators, promoters, social agents, etc.), using the most appropriate support and communication channels (especially the new information and communication technologies) in order to be able to understand the interests, needs and concerns of people and organizations, as well as clearly express the sense of the mission entrusted to them and how they can contribute, with their skills and professional knowledge, to the satisfaction of those interests, needs and concerns .

N2 - Cooperation with other people and organizations in the effective performance of functions and tasks according to their professional profile, developing a reflective attitude towards their own skills and professional knowledge and a comprehensive and empathetic attitude towards the skills and knowledge of other professionals.

N3 - Contribution to the continuous improvement of their profession, as well as the organizations in which they develop their practices through active participation in research, development and innovation processes.

N4 - Active engagement in the development of professional practices respectful of human rights as well as the ethical standards of their professional field to build trust in the beneficiaries of their profession and obtain the legitimacy and authority that society recognizes.

N5 - Active participation in multicultural integration that favours the full human development, coexistence and social justice.

## **Transversal Competences**

T1 - Analysis, synthesis, problem solving and decision making in the professional fields of the veterinarian.

T2 - Knowing and applying the scientific methods in professional practice including evidence-based veterinary science.

T3 - Searching and managing information related to the activity of the veterinarian, developing the ability to use information technologies to communicate, share, collect, manage and analyse information.

T4 - Communicating effectively with clients, the general public, other professionals and competent authorities, listening and responding effectively, and using language appropriate to the audience and context.

T5 - Disclosing the information obtained during the professional practice of the veterinarian in a fluent oral and written manner, with other colleagues, authorities and society in general, including the writing and presentation of professional reports, always maintaining the necessary confidentiality.

T6 - Working efficiently and effectively, both autonomously and as a member of a single or multidisciplinary team, expressing respect, appreciation and sensitivity towards the work of others.





T7 - Maintaining an ethical commitment in the exercise of their responsibilities before the profession and society.

T8 - Being prepared to use their professional skills to contribute, as much as possible, to the advancement of veterinary knowledge for the benefit of the veterinary profession and the improvement of the quality of animal care, animal welfare, public health and of the environment (Veterinary Sciences based on evidence).

T9 - Understanding the need and professional obligation to carry out education and continuous training for professional development keeping updated knowledge, skills and attitudes of professional skills throughout life.

T10 - Ability to adapt to new situations, being aware of personal limitations and understanding when and where to seek and obtain advice and professional support

T11 - Basic knowledge about the veterinary profession, especially the legal, economic, administrative and work organization context, and veterinary collegiate organizations, as well as the importance of quality assurance and the monitoring of standardization and protocols for the exercise of the profession veterinary

T12 - Knowledge of a second language, preferably English and, especially, in technical aspects related to Veterinary Sciences.

T13 - Knowledge of the principles of sustainability, respect for the environment and conservation of species in their natural environment.

### **Specific Competences**

These have been separated according to the different modules that make up the Verification procedure of ANECA:

#### **Common Basic Training Module.**

*The student must know and apply the following principles and bases:*

A1 Biometrics and statistics applied to Veterinary Sciences.

A2 Physical and chemical bases of biological processes and their applications to Veterinary Sciences.

A3 Morphology, bionomy and systematics of animals and plants of veterinary interest.

A4 Structure of the eukaryotic cell and its organization in tissues and organs.

A5 Morphology, topography and structure of organs and systems.

A6 Excitability and cellular communication. Operation and regulation of bodily devices and systems. Homeostasis

A7 Ontogenic development, congenital anomalies and applications of embryology.

A8 Molecular and genetic bases of biological processes.

A9 Basic principles of genetic biotechnology and population genetics.

A10 Ethnological and productive characteristics, with special reference to management.

A11 Bases of animal behaviour and the process of domestication.

A12 Being aware of the care, welfare, conservation and protection of animals in general.

A13 Study of microorganisms and parasites that affect animals and those with an industrial, biotechnological or ecological application.

A14 Bases and technical applications of the immune response.

A15 Nosology.





A16 Description and pathogenesis of the general alterations of the structure and function of cells, tissues, organs and systems.

A17 Ethical principles of the veterinary profession. Veterinary regulations and regulations. Animal welfare and protection. Bioethics

A18 Marketing and business management of general and veterinary field.

### **Clinical Sciences and Animal Health Module**

*The student must know and apply the following principles and bases:*

B1 Clinical examination methods and procedures, complementary diagnostic techniques and their interpretation.

B2 Diagnostic imaging and radiobiology.

B3 Necropsy. Recognition and diagnosis of the different types of injuries and their association with pathological processes.

B4 General pharmacological bases and study of the different types of drugs.

B5 Clinical study of the sick individual and of the medical, surgical or hygienic-dietetic treatments that they require, as well as of the sporadic diseases that affect collectives. Diagnosis.

B6 Anaesthesia and animal resuscitation. Surgical techniques used in Veterinary Medicine.

B7 Reproduction, partum and puerperium: Care and diseases. Assisted reproduction.

B8 Pharmacotherapy

B9 Identification and study of natural and synthetic toxins. Animal and environmental toxicology.

B10 Ictiopathology.

B11 Transmission and maintenance of diseases and methods of studying diseases in populations.

B12 Infectious and parasitic diseases of veterinary interest, including diagnosis and control.

B13 Zoonoses and Public Health.

B14 Promotion of health in animal groups, including wild animals, in order to obtain the maximum economic return in a socially, ethically and sanitarly acceptable manner.

B15 Technical measures and regulations for the prevention, control and eradication of animal diseases.

### **Animal Production Module**

*The student must know and apply the following principles and bases:*

C1 Bases of animal production: Traditional and current systems.

C2 Primary materials for animal feed: Characteristics, production and conservation.

C3 Bases of animal nutrition, formulation of rations and feed manufacture.

C4 Genetic applications to improvement and health programs.

C5 Reproductive strategies and procedures applied to production.

C6 Foundations of livestock and aquaculture facilities and environmental hygiene.





C7 Economy of the productive process and commercialization. Sustainable development.  
C8 Aquaculture.

### **Hygiene, Technology and Food Safety Module**

*The student must know and apply the following principles and bases:*

D1 Components and characteristics of food.  
D2 Technological processes of obtaining, conserving and transforming food.  
D3 Changes, alterations and adulterations that food may suffer.  
D4 Sanitary criteria and legal bases of the inspection.  
D5 Ante- and post-mortem veterinary inspection.  
D6 Inspection of establishments and products. Good hygienic practices, hazard analysis and critical control points. Control of manipulation and treatments.  
D7 Food Safety and Public Health. The food risk analysis: Determination, management and communication of risk.  
D8 Investigation of outbreaks of toxo-alimentary infections. Dynamics and demographics of infection and intoxication. Epidemiology and diagnosis. Monitoring and surveillance system.

### **Practical Training and Final Degree Project Module**

E1 Pre-professional practice, in the form of independent clinical rotation and with a final assessment of competencies, in university veterinary hospitals, mobile clinics, farms, pilot plants, departments with devices intended for practical teaching in the Veterinary Degree, as well as training periods in veterinary establishments, slaughterhouses, companies and external organizations of the veterinary or related field.  
E2 Attending emergencies in all animal species and performing basic first aid.  
E3 Final Degree Project: A transversal subject whose preparation will be carried out in association with different subjects.  
E4 Knowledge and practical application of the principles and methodologies of the veterinarian, as well as the acquisition of the skills and competences described in the general objectives of the Degree.

