



Poultry Production and Health

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-poultry-production-health

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Certificate

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tech 06 | Introduction

The Postgraduate Diploma in Poultry Production and Health brings a complete vision to the current situation of poultry production.

It analyzes the different systems used for the production of these species and the differences and similarities between them.

It analyzes the welfare and biosecurity measures required depending on the production system in question and establishes the main control strategies against the main diseases, as well as prevention tools and possible alternative treatments.

This module provides the tools and the knowledge needed to identify the main diseases of viral, infectious, parasitic or fungal nature in farm birds.

In order to do a good job in the field, the professional must have a solid theoretical knowledge of anatomy, pathophysiology and therapeutics, which they already possess through their higher academic training. But university programs sometimes lack extended and practical training.

The Postgraduate Diploma develops the anatomy and physiology of the species of interest, focusing on the characteristics of each species from a pathophysiological point of view, directly related to animal health.

After completing this training, the veterinary professional will have developed a specialized, broad and interrelated vision of the anatomy and physiology of the animal species under study and will be able to understand in a simple and global way the processes that can affect these individuals.

Feeding in livestock farms requires the optimal application of feeding procedures that allow the animal to obtain a balanced ration in terms of energy and nutrients. Therefore, it is essential to expand the principles governing the nutrition of different species, the nutritional value and characteristics of different foods, as well as the process of their preparation. This is so that the administrator or manager has the ability to make decisions and propose feeding techniques as part of their professional performance.

This **Postgraduate Diploma in Poultry Production and Health** offers you the advantages of a high-level scientific, teaching, and technological course. These are some of its most notable features:

- The latest technology in online teaching software.
- Highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand.
- Practical cases presented by practising experts.
- State-of-the-art interactive video systems.
- Teaching supported by telepractice.
- · Continuous updating and recycling systems.
- · Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification.
- Support groups and educational synergies: questions to the expert, debate and knowledge.
- Communication with the teacher and individual reflection work.
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after finishing the course.



Join the elite, with this highly effective training training and open new paths to help you advance in your professional progress"



A complete training program that will allow you to acquire the most advanced knowledge in all the areas of intervention of a specialized veterinarian"

Our teaching staff is made up of professionals from different fields related to this specialty. In this way, we ensure that we provide you with the training update we are aiming for. A multidisciplinary team of specialized and experienced professionals in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at your service the practical knowledge derived from their own experience: one of the differential qualities of this training.

The efficiency of the methodological design of this Professional Master's Degree, enhances the student's understanding of the subject. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

With the experience of working professionals and the analysis of real success stories, in a high-impact training.

With a methodological design based on proven teaching techniques, this innovative course will take you through different teaching approaches to allow you to learn in a dynamic and effective way.







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General Objectives

- Establish the anatomical characteristics of the species of interest from a pathophysiological focus
- Examine the physiological processes of the different apparatuses and organ systems of the different animal species
- Develop a specialized, general, and specific vision of the anatomy and physiology of the animal species of interest
- Analyze the relationships between the different organic systems and apparatuses
- Develop technical and scientific knowledge used in animal nutrition and animal food
- Implement strategies for optimal nutrition and feeding of the various species of economic and domestic animals and wildlife.
- Establish the principles of good animal feeding practices.
- Analyze the different production systems that exist for poultry production.
- Develop specialized knowledge in advanced aspects of Poultry Health.
- Perfect technical and scientific knowledge on the main diseases affecting birds.
- Delve into the methods of control and eradication of the main diseases affecting poultry.





Specific Objectives

Module 1. Animal Anatomy and Physiology

- Develop a specialized vision of the anatomy and physiology of the animal species of interest
- Examine the anatomical structures of the different apparatus and systems
- Analyze the comparative anatomy of the different species
- Directly relate the anatomical structures with the functionality and physiology of the process in which they are involved
- Establish the anatomical-physiological basis to understand the pathological processes directly or indirectly involved in Animal Health
- Deepen understanding of the physiological processes most frequently related to pathological processes
- Apply the acquired knowledge to concrete cases
- Consider Animal Health as a fundamental pillar of Public Health

Module 2. Animal Nutrition and Feed

- Analyze the different types of food and their importance in zootechnics
- Know the principles of analysis and characteristics of nutritional components in animal food
- Examine the physicochemical processes by which animals obtain nutrients through food intake in the different stages of development
- Implement the principles of feeding mechanisms of domestic species (monogastrics and ruminants) in each productive stage
- Specify which are the most appropriate tools for the implementation of good practices in animal feeding
- Analyze the tools used for the control and assurance of quality and safety of food for animal consumption

Module 3. Poultry Production and Health

- Examine the different production systems available for poultry production.
- Analyze the differences and similarities between different Production Systems.
- Establish the main Biosecurity Measures in Poultry Farms.
- Autonomously perform a Poultry Necropsy based on the Guidelines obtained in the Course.
- Identify the Macroscopic Lesions obtained in the Anatomopathological examination and establish differential Diagnosis with the most probable disease.
- Deepen on the most relevant Pathologies affecting Production Birds.
- Design strategies for the prevention of pathologies in poultry.



A path to achieve training and professional growth that will propel you towards a greater level of competitiveness in the employment market"





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Management



Dr. Ruiz Fons, José Francisco

- PhD from UCLM 2006.
- Degree in Veterinary Medicine (2002) from the University of Murcia
- Member of the Spanish Society for the Conservation and Study of Mammals (SECEM) and the Wildlife Disease Association (WDA).
- Contracted Predoctoral FPU (2007) of the Ministry of Education and Science at the Institute of Research in Hunting Resources IREC (CSIC-UCLM-JCCM)
- Postdoctoral contract JCCM and Carlos III Institute of Health at The James Hutton Institute (Aberdeen, Scotland; 01.07.2007-31.08.2008) and at Neiker-Tecnalia (Derio, Biscay; 01.09-2008-31.08.2010), respectively.
- Contracted JAE-DOC CSIC at IREC (2010 to 2011)
- Supervision of 11 Master's Theses, 3 final Degree theses, 2 Doctoral Theses and 5 Doctoral Theses currently in progress.
- Lecturer in Animal Health, Epidemiology, Prevention, and Control of Diseases shared between Dogs, Cats, and Other Species and Livestock in the UCLM Professional Master's Degree "Basic and Applied Research in Hunting Resources" in the last 12 years.
- Lecturer in Professional Master's Degree in "Animal Medicine, Health, and Improvement" at the University of Cordoba in 2015-16. He has been invited speaker in more than 30 specialization courses for veterinarians, farmers, hunters, and public administration staff, and in conferences and seminars on aspects of the Health of Wild Species and Global Health.

Professors

Ranilla García, Jara

- Degree in Veterinary Medicine from the University of Leon.
- Degree in Veterinary Medicine by means of the Bachelor's Thesis modality. University of Leon
- Certificate of Pedagogical Aptitude. University of Leon
- Professional Master's Degree in Veterinary Research and Food Science and Technology, University of Leon
- Postgraduate Diploma in Small Animal Surgery and Anesthesia. Autonomous University of Barcelona
- Research Grant from the Institute of Zamora Studies "Florián de Ocampo" Zamora Provincial Council Zamora Provincial Council
- Extensive experience in Emergency Medicine, Intensive Care, and Surgery
- Extensive training in Anesthesia, Monitoring, and Mechanical Ventilation
- Has worked in numerous Hospitals and Reference Centers
- Regular Attendee to Courses and Congresses mostly related to his main area of interest,
 Soft Tissue Surgery, a field to which he is currently dedicated exclusively

Dr. Rosales Pérez, Mónica

- Ph.D. in Chemical-Biological Sciences
- Degree in Pharmacobiological Chemistry
- · Postgraduate Studies in the area of Life Sciences
- Professional Master's Degree in Basic and Applied Research in Hunting Resources, from the Institute for Research in Hunting Resources-University of Castilla-La Mancha, Campus Ciudad Real, Spain
- Professional Master's Degree in Microbiology, National Polytechnic Institute, Mexico City (Mexico)
- Professor, Department of Biotechnology, Biotechnology Engineering. Monterrey Technological Puebla, Mexico
- Teaching courses in Chemistry, Genetics, Industrial Microbiology, Toxicology, Bioprocesses, and Industrial Microbiology and Bioprocesses Laboratory. Development of Research and Social Service Projects. Coordinator of continuing education symposiums
- Professor at the Swiss Institute of Gastronomy and Hotel Management. Puebla, Mexico
- Taught the subject of Microbiology and Food Hygiene and Laboratory Practices in the Bachelor's Degree in Gastronomy and the Bachelor's Degree in Hotel and Restaurant Management. In the Professional Master's Degree in Bakery Production, Confectionery, and International Confectionery, I taught the course of Environmental Management in the Hospitality Industry.

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Dr. Sarmiento, Ainhoa

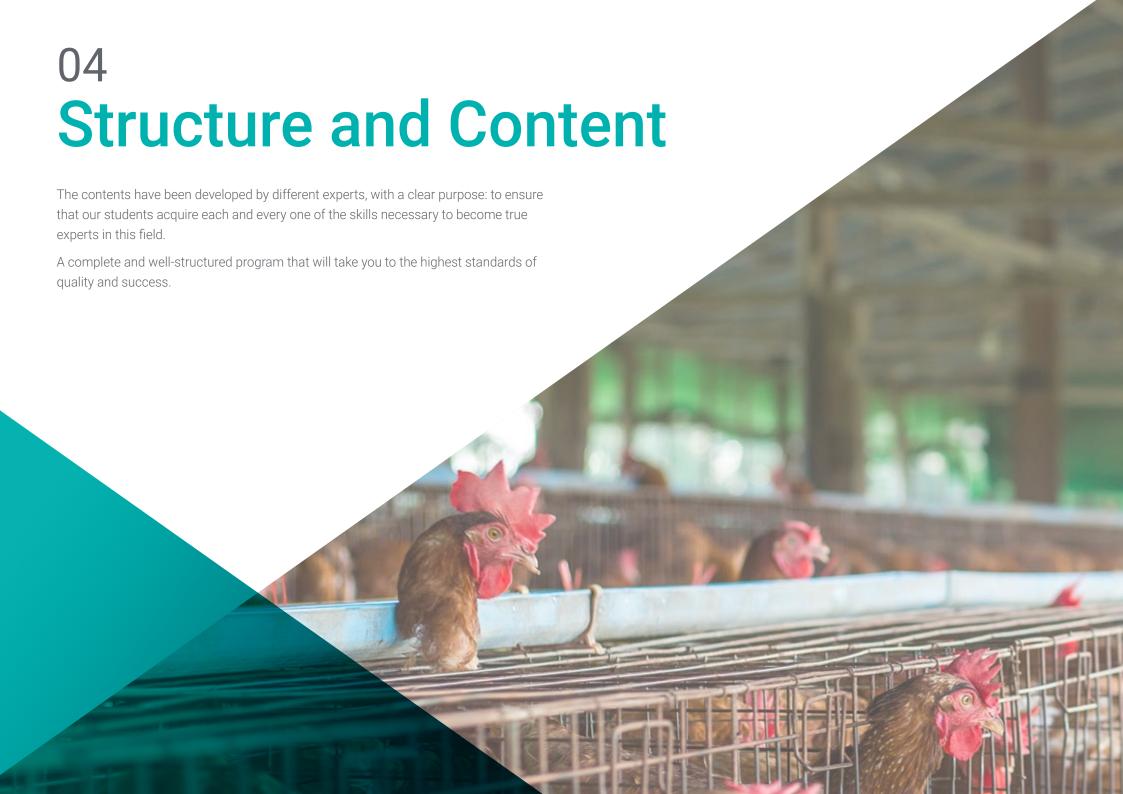
- Veterinarian. Responsible for the Nutrition Department (03-17/currently). Casaseca Livestock 2010, SLU. Functions Development and formulation of diets for Iberian Swine.
- Responsible for the Antibiotic Reduction Program and Animal Welfare. Management of Productive Data of Fattening and Mothers (Pigchamp)
- Elaboration of Projects. R&D&I Management. Collaborative Researcher (09/17-Currently)
- Faculty of Agricultural and Environmental Sciences and Polytechnic School of Zamora.
 University of Salamanca Functions: Participation in Projects, Papers and Communications to Congresses. Analysis of Production and Meat Quality Data







An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed"

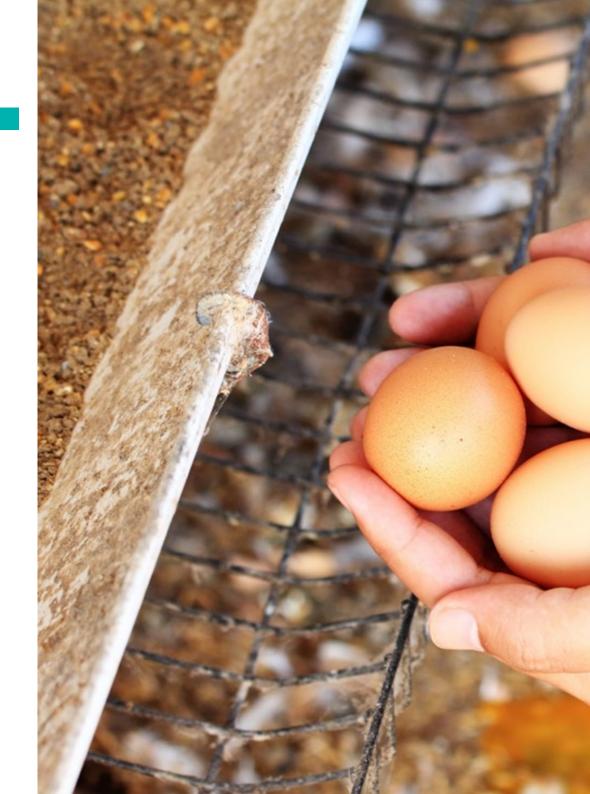




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Module 1. Animal Anatomy and Physiology

- 1.1. Anatomy of Ruminants
 - 1.1.1. Locomotor System
 - 1.1.2. Digestive System
 - 1.1.3. Cardiovascular System
 - 1.1.4. Respiratory System
 - 1.1.5. Urinary System
 - 1.1.6. Reproductive System
 - 1.1.7. Nervous System and Sense Organs
- 1.2. Equine Anatomy
 - 1.2.1. Locomotor System
 - 1.2.2. Digestive System
 - 1.2.3. Cardiovascular System
 - 1.2.4. Respiratory System
 - 1.2.5. Urinary System
 - 1.2.6. Reproductive System
 - 1.2.7. Nervous System and Sense Organs
- 1.3. Swine Anatomy
 - 1.3.1. Locomotor System
 - 1.3.2. Digestive System
 - 1.3.3. Cardiovascular System
 - 1.3.4. Respiratory System
 - 1.3.5. Urinary System
 - 1.3.6. Reproductive System
 - 1.3.7. Nervous System and Sense Organs
- 1.4. Anatomy of Dogs and Cats
 - 1.4.1. Locomotor System
 - 1.4.2. Digestive System
 - 1.4.3. Cardiovascular System
 - 1.4.4. Respiratory System
 - 1.4.5. Urinary System
 - 1.4.6. Reproductive System
 - 1.4.7. Nervous System and Sense Organs





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- 1.5. Anatomy of Birds
 - 1.5.1. Locomotor System
 - 1.5.2. Digestive System
 - 1.5.3. Cardiovascular System
 - 1.5.4. Respiratory System
 - 1.5.5. Urinary System
 - 1.5.6. Reproductive System
 - 1.5.7. Nervous System and Sense Organs
- 1.6. Neurophysiology
 - 1.6.1. Introduction
 - 1.6.2. The Neuron and The Synapse
 - 1.6.3. Lower Motor Neuron, Upper Motor Neuron, and its Alterations
 - 1.6.4. Autonomic Nervous System
 - 1.6.5. Cerebrospinal Fluid and Blood-Brain Barrier
- 1.7. Cardiovascular and Respiratory Physiology
 - 1.7.1. Introduction
 - 1.7.2. Electrical Activity of the Heart. Electrocardiogram
 - 1.7.3. Pulmonary and Systemic Circulation
 - 1.7.4. Neuronal and Hormonal Control of Blood Volume and Blood Pressure
 - 1.7.5. Respiratory Function: Pulmonary Ventilation
 - 1.7.6. Gas Exchange
- 1.8. Physiology of the Gastrointestinal Tract and Endocrinology
 - 1.8.1. Regulation of Gastrointestinal Functions
 - 1.8.2. Secretions of the Digestive Tract
 - 1.8.3. Non-fermentative Processes
 - 1.8.4. Fermentation Processes
 - 1.8.5. Endocrine System
- 1.9. Renal Physiology
 - 1.9.1. Glomerular Filtration
 - 1.9.2. Water Balance
 - 1.9.3. Acid-base Balance

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- 1.10. Reproduction Physiology
 - 1.10.1. Reproductive Cycles
 - 1.10.2. Gestation and Labor
 - 1.10.3. Male Reproductive Physiology

Module 2. Animal Nutrition and Feed

- 2.1. Introduction to Animal Nutrition and Feed Types of Food
 - 2.1.1. Grazing
 - 2.1.2. Silages
 - 2.1.3. Feedstuffs
 - 2.1.4. Agro-industrial By-products
 - 2.1.5. Supplements
 - 2.1.6. Biotechnological Products
- 2.2. Food Analysis and Composition
 - 2.2.1. Water and Dry Matter
 - 2.2.2. Proximate Determination of Foods
 - 2.2.3. Protein and Non-protein Nitrogen Analysis
 - 2.2.4. Fiber Determination
 - 2.2.5. Mineral Analysis
- 2.3. Nutritional Value of Animal Feeds
 - 2.3.1. Digestibility
 - 2.3.2. Crude and Digestible Protein
 - 2.3.3. Energy Content
- 2.4. Nutrition and Digestion in Monogastric Animals
 - 2.4.1. Digestive Processes in Swine
 - 2.4.2. Digestive Processes in Poultry
 - 2.4.3. Digestive Processes in Dogs and Cats
 - 2.4.4. Prececal Digestion in Horses
 - 2.4.6. Absorption and Detoxification

- 2.5. Nutrition and Digestion in Ruminants and other Herbivores
 - 2.5.1. Dynamics of Digestion in Ruminants
 - 2.5.2. Control and Modification of Rumen Fermentation
 - 2.5.3. Alternative Digestion Sites
 - 2.5.4. Digestion and Environment
- 2.6. Absorption and Metabolism
 - 2.6.1. Metabolism of the Main Components of Food
 - 2.6.2. Metabolism Control
- 2.7. Animal Feeding
 - 2.7.1. Nutritional Requirements of Maintenance
 - 2.7.2. Nutritional Requirements during Growth
 - 2.7.3. Nutritional Requirements during Reproduction
 - 2.7.4. Lactation
 - 2.7.5. Voluntary Feed Intake

Module 3. Poultry Production and Health

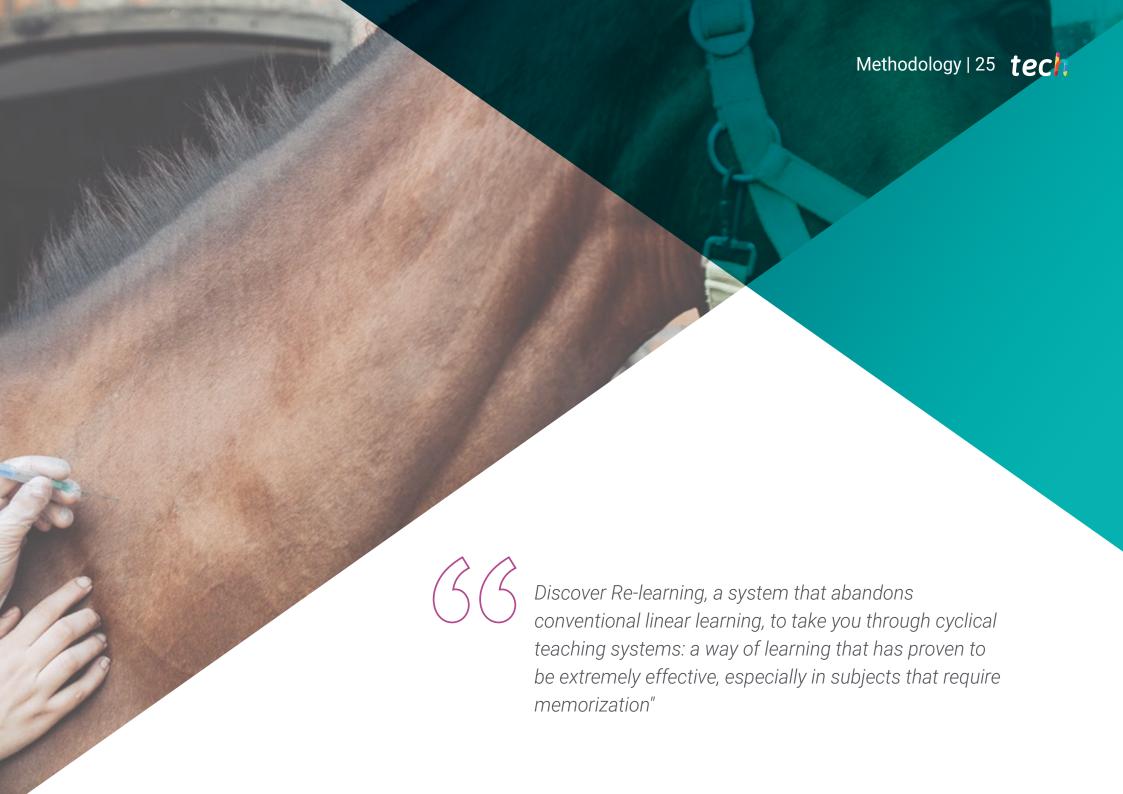
- 3.1. Poultry Production Systems
 - 3.1.1. Industrial Production
 - 3.1.2. Free-range Production
 - 3.1.3. Organic Production
 - 3.1.4. Other Alternative Production
- 3.2. Animal Welfare and Biosecurity Measures in Poultry
 - 3.2.1. Biosecurity Measures in Poultry Farms.
 - 3.2.2. Animal Welfare in Meat Poultry
 - 3.2.3. Animal Welfare in Laying Poultry
- 3.3. Poultry Necropsy
 - 3.3.1. Technique
 - 3.3.2. Sample Collection
 - 3.3.3. Interpretation of Lesions



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- 3.4. Main Bacterial Diseases
 - 3.4.1. Fowl Cholera
 - 3.4.2. Infectious Coryza
 - 3.4.3. Colibacillosis
 - 3.4.4. Mycoplasmosis
- 3.5. Main Viral Diseases (I)
 - 3.5.1. Infectious Bronchitis
 - 3.5.2. Avian Encephalomyelitis
 - 3.5.3. Gumboro Disease
 - 3.5.4. Marek's Disease
- .6. Main Viral Diseases (II)
 - 3.6.1. Newcastle Disease
 - 3.6.2. Influenza
 - 3.6.3. Infectious Laryngotracheitis
 - 3.6.4. Leukosis (Lymphoid, Myeloid)
- 3.7. Main Viral Diseases (III)
 - 3.7.1. Infectious Rhinotracheitis
 - 3.7.2. Laying Drop Syndrome
 - 3.7.3. Fowl Pox
 - 3.7.4. Infectious Anemia
- 3.8. Main Parasitic Diseases
 - 3.8.1. Coccidiosis
 - 3.8.2. Histomoniasis
 - 3.8.3. Other Intestinal Parasitosis
 - 3.8.4. Trichomoniasis
 - 3.8.5. Other Respiratory Parasitosis
- 3.9. Fungal Diseases
 - 3.9.1. Aspergillosis
 - 3.9.2. Mycotoxicosis
- 3.10. Sanitary Actions
 - 3.10.1. Disease Control Strategies
 - 3.10.2. Vaccination Plans
 - 3.10.3. Antibiotic Treatments
 - 3.10.4. Alternative Treatments





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At TECH we use the Case Method

In a given clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential that the case be based on current professional life, trying to recreate the real conditions in the Veterinarian's Professional Practice.



Did you know that this method was developed in 1912 at Harvard for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Veterinarians who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
- 2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



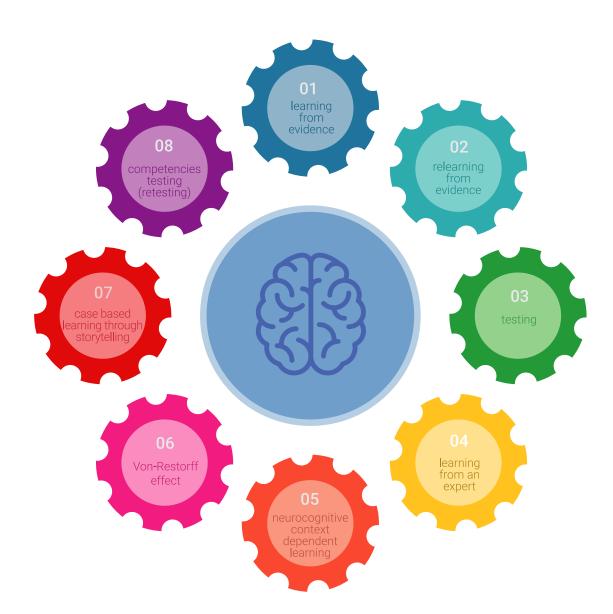


Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





Methodology | 29 tech

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 65,000 veterinarians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

In this program you will have access to the best educational material, prepared with you in mind:



Study Material

All the teaching materials are specifically created for the course by specialists who teach on the course so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Latest Techniques and Procedures on Video

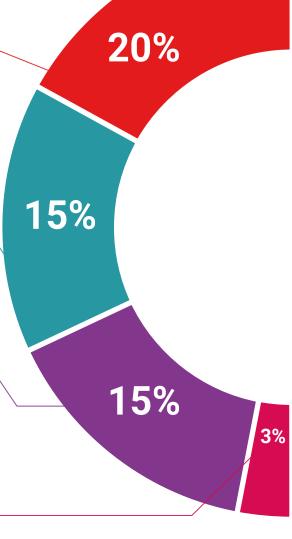
We bring you closer to the latest Techniques, to the latest Educational Advances, to the forefront of current Veterinary Techniques and Procedures. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

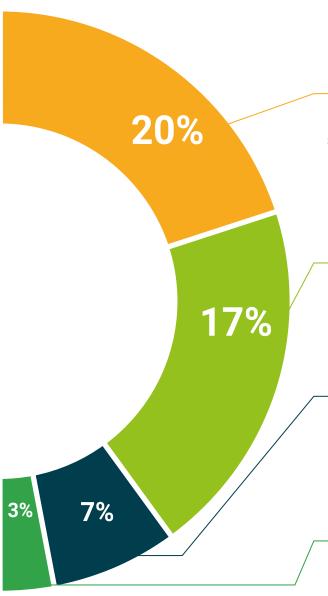
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.



Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Re-Testing

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.





Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







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This program will allow you to obtain your **Postgraduate Diploma in Poultry Production and Health** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Poultry Production and Health

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Diploma in Poultry Production and Health

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



Postgraduate Diploma Poultry Production and Health

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