Postgraduate Diploma
Swine Production and Health

tech technological university

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Postgraduate Diploma
Swine Production and Health

Course Modality: **Online**
Duration: **6 months.**
Certificate: **TECH Technological University**
18 ECTS Credits
Teaching Hours: **450 hours.**
Website: **www.techtitute.com/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-swine-production-health**

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01

Introduction

The program in Swine Production and Health focuses on pig production, an area that has undergone enormous technological development in recent decades, moving from small family farms to highly specialized production systems with highly specialized farms. Likewise, and given the economic importance within the Spanish livestock production, it provides a broad vision of the Iberian pig sector, whose production is linked to the sustainable use of natural resources.

In addition, during the program we will develop the anatomy and physiology of the species of interest and the aspects of nutrition and feeding of animal species of zootechnical and wildlife interest, in the context of health management from the 'One Health' point of view.

A high-quality program that will drive you to the highest levels of competence in the sector.

A complete and total update in Swine Production and Health with the most complete and effective training program on the online educational market"

The profitability of livestock production requires high sanitary standards. Advances in swine production have always evolved in parallel with improvements in animal health.

In spite of the important results achieved in disease control and prevention, there are still sanitary problems in the swine production sector that require a therapeutic solution. The industry continues to be threatened by new or re-emerging diseases, which is why the use of antibacterial treatments is still a necessary tool in pig farming.

However, disease control must be carried out in an integrated manner, on several fronts, such as hygienic measures for cleaning and disinfection, vector control, stress-free animal management, personnel hygiene, visitor control, animal quarantine, isolation and protection of buildings, sanitary vacuum, etc.

The curriculum provides a solid and up-to-date training in Swine Production and Health, successfully addressing the work of veterinary specialists in companies and industries engaged in swine production.

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.

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.

This **Postgraduate Diploma in Swine Production and Health** contains the most complete and up-to-date scientific program on the market. The most important features include:

- 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 available from any fixed or portable device with internet connection.
- Supplementary documentation databases are permanently available, even after the course.

Join the elite, with this highly effective educational 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"

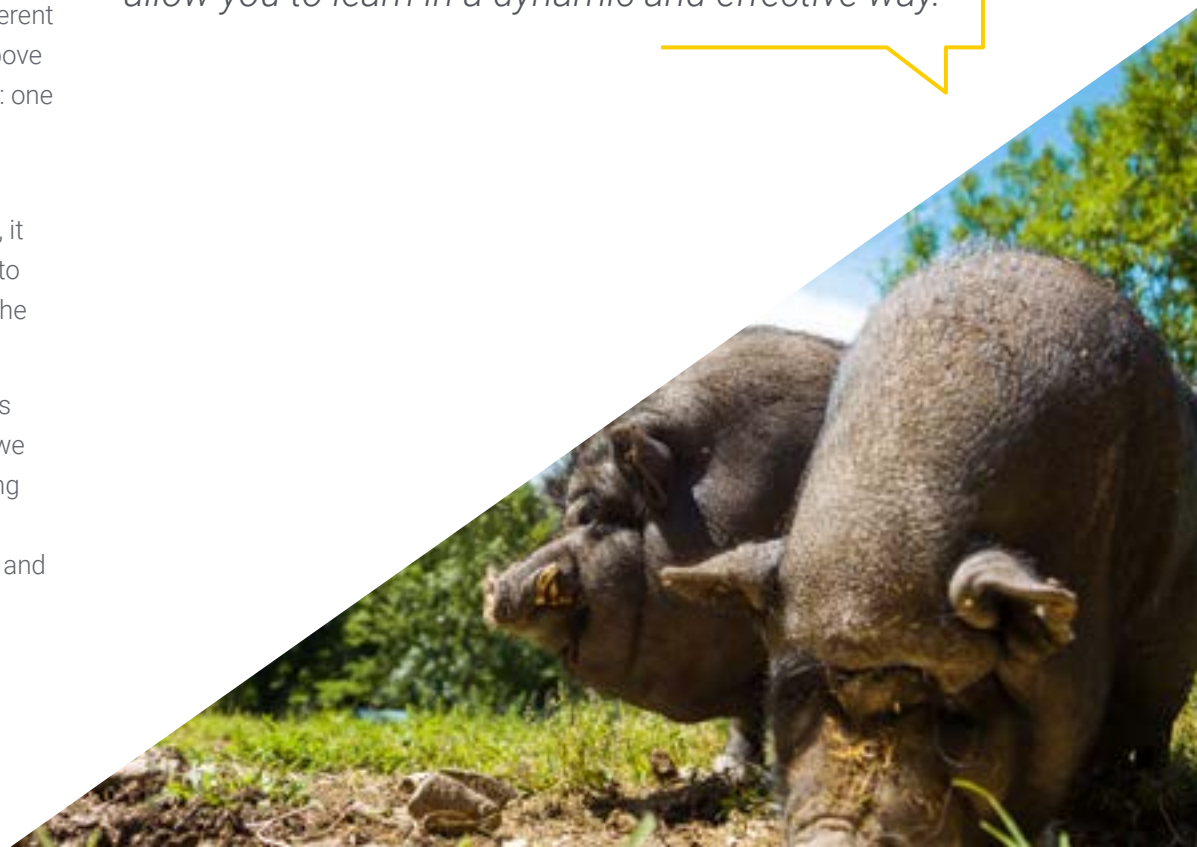
With the experience of working professionals and the analysis of real success stories, in a high-impact training approach.

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.

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 educational update we are aiming for. A multidisciplinary team of professionals trained and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but above all, they will bring their practical knowledge from their own experience to the course: one of the differential qualities of this training.

This mastery of the subject matter is complemented by the effectiveness of the methodological design. 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: a plan which views learning as an eminently practical process. To achieve it through distance learning we 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 facing the scenario you are learning at that moment. A concept that will allow you to integrate and consolidate the learning in a more realistic and permanent way.



02

Objectives

Our objective is to train highly qualified professionals for the working world. An objective that is complemented in a global manner, by promoting human development that lays the foundations for a better society. This objective is materialized in helping professionals to reach a much higher level of competence and control. A goal that, in just a few months you will be able to achieve, with a high intensity and effective training.

If your objective is to broaden your skills set to include new paths of success and development, this is the course for you: a training that aspires to excellence"

General Objectives

- Develop advanced training in the field of Swine Production and Health
- Integrate knowledge to address real problems and propose models and solutions in an efficient, effective, reasoned, and correct way
- Offer specialized technical support, which can be an added value in each farm that is assessed
- Control or eradicate diseases with economic repercussions
- 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.

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. Swine Production and Health

- Analyze and apply, autonomously, the concepts, tools and management related to sanitation in pig farming
- Diagnose and define with certainty the etiology of the pathology, pathophysiological mechanisms of the main diseases affecting swine production
- Propose diagnostic methods, treatments within the legal framework, and prevention methods related to swine health
- Improve facilities, management, and feeding, in order to obtain maximum productive performance
- Guide and demonstrate that animal welfare conditions at all stages allow a higher performance in swine production
- Design farms, minimizing the negative impact on the environment
- Identify opportunities for improvement on farms and replicate the knowledge to people working in swine production

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

03

Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and competencies that make up a complete multidisciplinary team. A unique opportunity to learn from the best.

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

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.
- 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
- 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 of the Biotechnology Department of Biotechnology Engineering, Monterrey Puebla, (Mexico)
- Teaching courses in Chemistry, Genetics, Industrial Microbiology, Toxicology, Bioprocesses, and Industrial Microbiology and Bioprocesses Laboratory Development of research and social service projects. Continuing education symposium coordinator.
- 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 and in the Professional Master's Degree in Bakery Production, Confectionery, and International Confectionery. She also taught the course of Environmental Management in the Hospitality Industry.

Dr. García, Alfredo

- PhD in Veterinary Medicine (2002) Faculty of Veterinary Medicine, University of Extremadura, Cáceres, (Spain).
- Degree in Veterinary Medicine (1991) (specializing in Animal Medicine and Health). Faculty of Veterinary Medicine of Cáceres, University of Extremadura. Degree in Biochemistry (2001), University of Extremadura.
- University Expert Course "Statistics applied to Health Sciences" (UNED) (500 teaching hours)
- Professional Master's Degree in Environmental Management (500 teaching hours).
- Grant holder at the University of Extremadura, under the research project of the European Union INCO-DC program "Genetic and Immunological control on dermatophilosis" (1998-2001)
- Associate Professor in the subjects of Infectious Diseases, Epidemiology, and Clinical Analysis, in the Department of Animal Medicine and Health of the Faculty of Veterinary Medicine of Cáceres, UEX
- Postdoctoral Contract at the Moredun Research Institute, Edinburgh, Scotland, United Kingdom (2002-2005)
- Postdoctoral Contract in the Cancer Research Center of Salamanca (April - Nov 2005) Laboratory 20 Molecular Pathology

Sánchez Tarifa, Eugenio

- Veterinary technical advisor, Boehringer-Ingelheim Animal Health España, S.A.U. Veterinary health and production consulting for swine companies and farms.
- Veterinary Technical Service, Ingafood, S.A. Sanitary and Productive Management of Swine Farms in Integration
- Veterinarian, Veterinary Clinic La Paz
- Veterinarian in Small Animal Clinic

Dr. Risco Pérez, David

- PhD in Veterinary Medicine from the University of Extremadura. His Doctoral thesis entitled "Characterization of Infectious Processes in Wild Boars in Southwestern Spain" was awarded the Extraordinary Doctoral Prize of the University of Extremadura.
- Syva Award for the best thesis in Animal Health in 2015.
- Postdoctoral training at the University of Aveiro (Portugal).
- Researcher of the Torres Quevedo Program, co-funded by the Ministry of Economy and Competitiveness (Ref.PTQ-14-06663), whose work has been developed at the Innovation in Management and Conservation of Ungulates S.L. Company
- Administrator of Neobeitar S.L., a recently created company dedicated to Laboratory Diagnosis, Veterinary Technical Consultancy, and Innovation in Animal Health.

Gómez García, Andrea

- Degree in Veterinary Medicine from the University of Zaragoza.
- Master's Degree in Swine Health and Production from the University of Lérida
- Part of the Technical - Commercial team at Alternative Swine Nutrition (ASN)

Gómez Gómez, Francisco Javier

- Swine Technical Manager at Laboratorios Maymó
- Degree in Veterinary Medicine from the University of Extremadura and Master in Sales and Marketing Management from EAE Business School
- Technician in charge of Farms or as External Advisor to Swine veterinarians
- Member of Porcine Sanitary Defence Group in the province of Salamanca
- Technical-economic Manager of Farms in all the productive phases of the sector in Inga Food
- Teacher of External Practices of the Department of Animal Health of the Complutense University of Madrid.
- Pig commercial technician in Ecuphar Veterinaria

Dr. Limón Garduza, Rocío Ivonne

- Quality Inspector and Bromatological Expertise at Just Quality System S.L.
- Responsible for Quality Management and Project Development at KMC, Majadahonda (Madrid)
- Head of the Quality Control Department at Frutas Garralón Imp-Exp, S.A. Mercamadrid. (Madrid)
- PhD in Agricultural Chemistry and Bromatology (Universidad Autónoma de Madrid)
- Master's Degree in Food Biotechnology (MBTA) University of Oviedo
- Food Engineer, Bachelor in Food Science, and Technology (CYTA)
- Expert in Food Quality Management ISO 22000
- Specialist in Food Quality and Safety, Mercamadrid Training Center (CFM)

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"

04

Structure and Content

The contents have been developed by different experts, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this subject.

A complete and well-structured program that will take you to the highest standards of quality and success.

A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"

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

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
- 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

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
- 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

2.8 Good Animal Feeding Practices
- 2.8.1. Water:
- 2.8.2. Good Grazing Practices
- 2.8.3. Stall Feeding
- 2.8.4. Fattening and Intensive Feeding

2.9 Animal Feed Quality Control and Assurance
- 2.9.1. Transport, Reception, and Storage Control
- 2.9.2. Food Preparation and Administration Control
- 2.9.3. Sanitation and Pest Control
- 2.9.4. Traceability and Lot Recovery
- 2.9.5. Food Analysis
- 2.9.6. Personnel Training
- 2.9.7. Record Keeping and Documentation System

2.10. Food Safety
- 2.10.1. The concept of Food Hazards
- 2.10.2. Types of Food Hazards
- 2.10.3. Hazard Control Measures in Animal Feed
- 2.10.4. The concept of Risk in Food
- 2.10.5 Risk Assessment Applied to Food Safety
- 2.10.6 Good Agricultural Practices and Animal Food Safety
- 2.10.7. Food Safety Assurance Management

Module 3. Swine Production and Health

3.1 Installations in Swine Farms
- 3.1. 1 External Biosafety Common on all Farms
- 3.1.2. Breeder Farm
- 3.1.3. Weaning Farm
- 3.1.4. Fattening Farm

3.2 Management in Swine Production
- 3.2. 1 Management Related to Breeders
- 3.2.2. Management Related to Weaned Piglets
- 3.2. 3 Management Related to Fattening Pigs

3.3 Main Infectious Diseases (I)
- 3.3.1 Diseases producing Systemic Symptomatology
  - 3.3.1.1. African Swine Fever (ASF)
  - 3.3.1.2. Diseases associated with Porcine CircovirusType 2
    - 3.3.1.2.1. Post-weaning Multisystemic Wasting Syndrome (PMWS)
    - 3.3.1.2.2. Proliferative Necrotizing Pneumonia (PNP) or Lung Disease.
    - 3.3.1.2.3. Enteritis or Enteric Disease
    - 3.3.1.2.4. Dermatitis and Nephropathyporcine Syndrome (PDNS).
  - 3.3.1.3. Red Disease
  - 3.3.1.4. Sudden Death due to Clostridium Novyi Types A and B.

3.4. Main Infectious Diseases (II)
- 3.4.1. Porcine Respiratory Complex
- 3.4.2. Pneumonia in Swine Zootics (PNE)
- 3.4.3. Porcine Reproductive and Respiratory Syndrome (PRRS).
- 3.4.4. Glassër's Disease
- 3.4.5. Porcine Pleuropneumonia (PP)
- 3.4.6. Swine Influenza or Swine Flu
- 3.4.7. Pasteurellosis
  - 3.4.7.1. Pneumonic Processes
  - 3.4.7.2. Porcine Atrophic Rhinitis (AR)

3.5. Main Infectious Diseases (III) Digestive Pathologies
- 3.5.1. Hemorrhagic Dysentery
  - 3.5.1.1. Etiology
  - 3.5.1.2 Patogenesis
  - 3.5.1.3 Diagnosis
  - 3.5.1.4 Treatment
  - 3.5.1.5. Practical Aspects
- 3.5.2. Proliferative Ileitis
  - 3.5.2.1. Etiology
  - 3.5.2.2. Pathogenesis
  - 3.5.2.3. Diagnosis
  - 3.5.2.4. Treatment
  - 3.5.2.5. Practical Aspects.
- 3.5.3 Colibacillosis
  - 3.5.3.1. Etiology
  - 3.5.3.2. Pathogenesis
  - 3.5.3.3. Diagnosis
  - 3.5.3.4. Treatment
  - 3.5.3.5. Practical Aspects
- 3.5.4 Clostridiosis
  - 3.5.4.1. Etiology
  - 3.5.4.2. Pathogenesis
  - 3.5.4.3. Diagnosis
  - 3.5.4.4. Treatment
  - 3.5.5.5. Practical Aspects.
- 3.5.5. Salmonellosis
  - 3.5.5.1. Etiology
  - 3.5.5.2. Pathogenesis
  - 3.5.5.3. Diagnosis
  - 3.5.5.4. Treatment
  - 3.5.5.5. Practical Aspects.

3.6. Frequent Causes of Reproductive Failure in Sows
- 3.6.1. Causes of Infectious Origin
  - 3.6.1.1. Bacteria
    - 3.6.1.1.1. Leptospira Interrogans
    - 3.6.1.1.2. Brucella Suis
    - 3.6.1.1.3. Chlamydias
    - 3.6.1.1.4. Dirty Sow Syndrome (SCS)
  - 3.6.1.2. Virus
    - 3.6.1.2.1. Porcine Reproductive and Respiratory Syndrome (PRRS)
    - 3.6.1.2.2. Porcine Parvovirus (PPV)
    - 3.6.1.2.3. Porcine Circovirus Type 2 (PCV 2)
    - 3.6.1.2.4. Aujeszky's Disease Virus (ADV)
- 3.6.2. Causes of Non-infectious Origin Associated with:
  - 3.6.2.1. Breeder Management
    - 3.6.2.1.1. Replenishment
    - 3.6.2.1.2. Estrus Detection
    - 3.6.2.1.3. Seminal Quality
  - 3.6.2.2. Environments and Facilities
  - 3.6.2.3. Food

3.7. Main Parasitic Diseases
- 3.7.1. Internal Parasites
  - 3.7.1.1. Digestive Parasites
    - 3.7.1.1.1. Roundworms: Ascarissuum
    - 3.7.1.1.2. Whipworms: Trichurissuis
    - 3.7.1.1.3. Red Stomach Worms: Hyostrongylusrubidus
    - 3.7.1.1.4. Nodular Worms: Oesophagostomumdendatum
    - 3.7.1.1.5. Thread worms: Strongyloidesransomi
  - 3.7.1.2. Pulmonary Parasites
    - 3.7.1.2.1. Lung Worms: Metastrongylusapri
- 3.7.2. External Parasites
  - 3.7.2.1. Scabies
  - 3.7.2.2. Lice
- 3.7.3. Other Parasitic Diseases
  - 3.7.3.1. Trichinellosis: Trichinellaspiralis

3.8. Sanitary Actions (I)
- 3.8.1. Diagnosis of Sanitary Problems in Farms
- 3.8.2. Regulated Necropsy and Interpretation of Lesions
- 3.8.3. Sampling and Sending to Diagnostic Laboratory
- 3.8.4. Interpretation of Laboratory Results.

3.9 Sanitary Actions (II)
- 3.9.1. Disease Control Strategies
- 3.9.2. Vaccination Plans
- 3.9.3 Antibiotic Treatments
- 3.9.4 Alternative Treatment

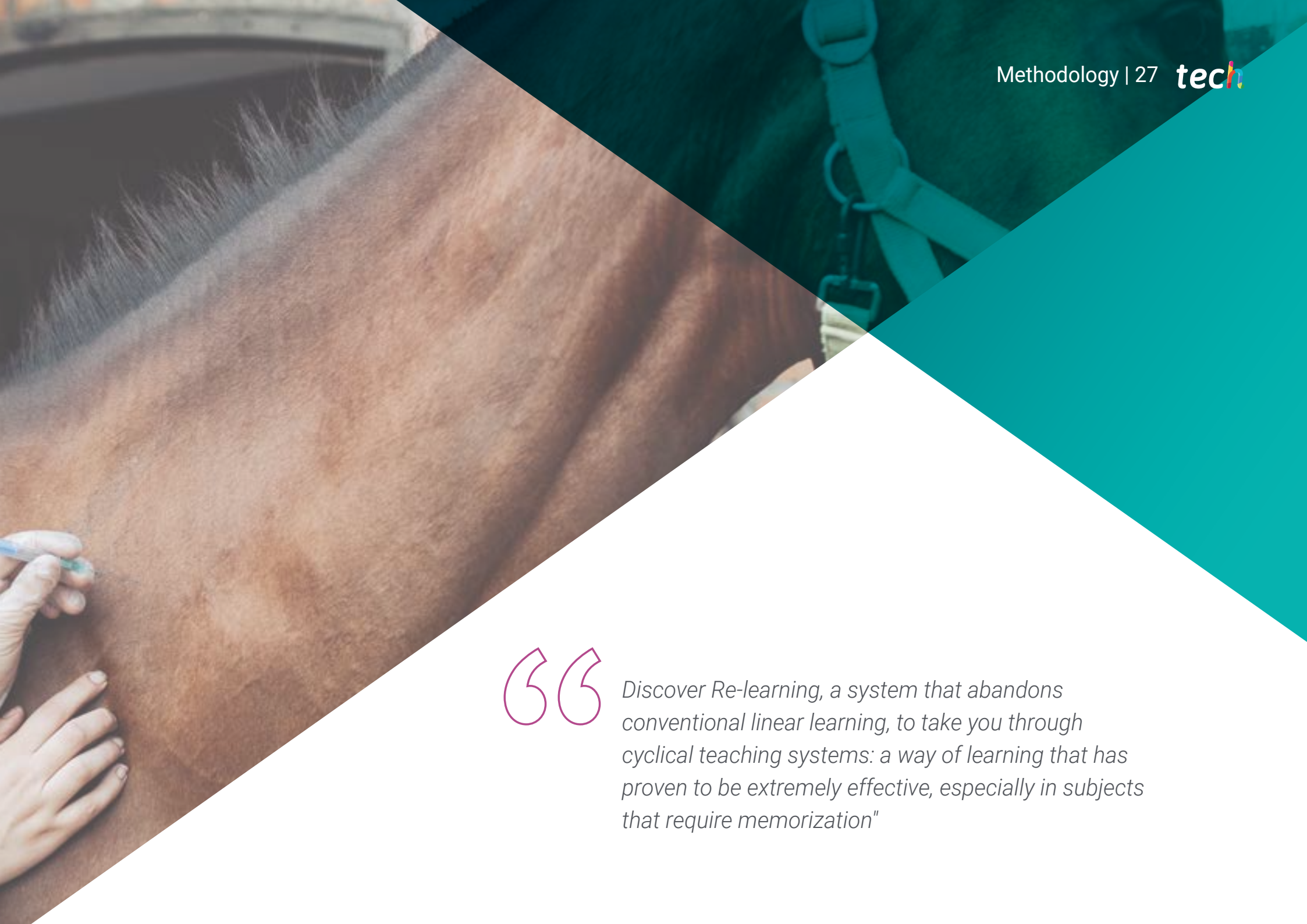
3.10. Food Safety and Environmental Management
- 3.10.1. Food Safety and Feed Hygiene
  - 3.10.1.1. Regulation (EC) 183/2005
  - 3.10.1.2. Quality Plan
  - 3.10.1.3. Cleaning and Disinfection Plan
- 3.10.2. Waste Management
  - 3.10.2.1. Slurry Management Plan
  - 3.10.2.2. On-Farm Gas Production

05

Methodology

This training offers you a different way to learn. Our methodology follows a cyclical learning process: ***Re-learning***.

This teaching system is used in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.



Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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. 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 manage to assimilate concepts also develop their mental capacity through exercises to evaluate real situations and knowledge application

2 Learning is solidly translated into 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.

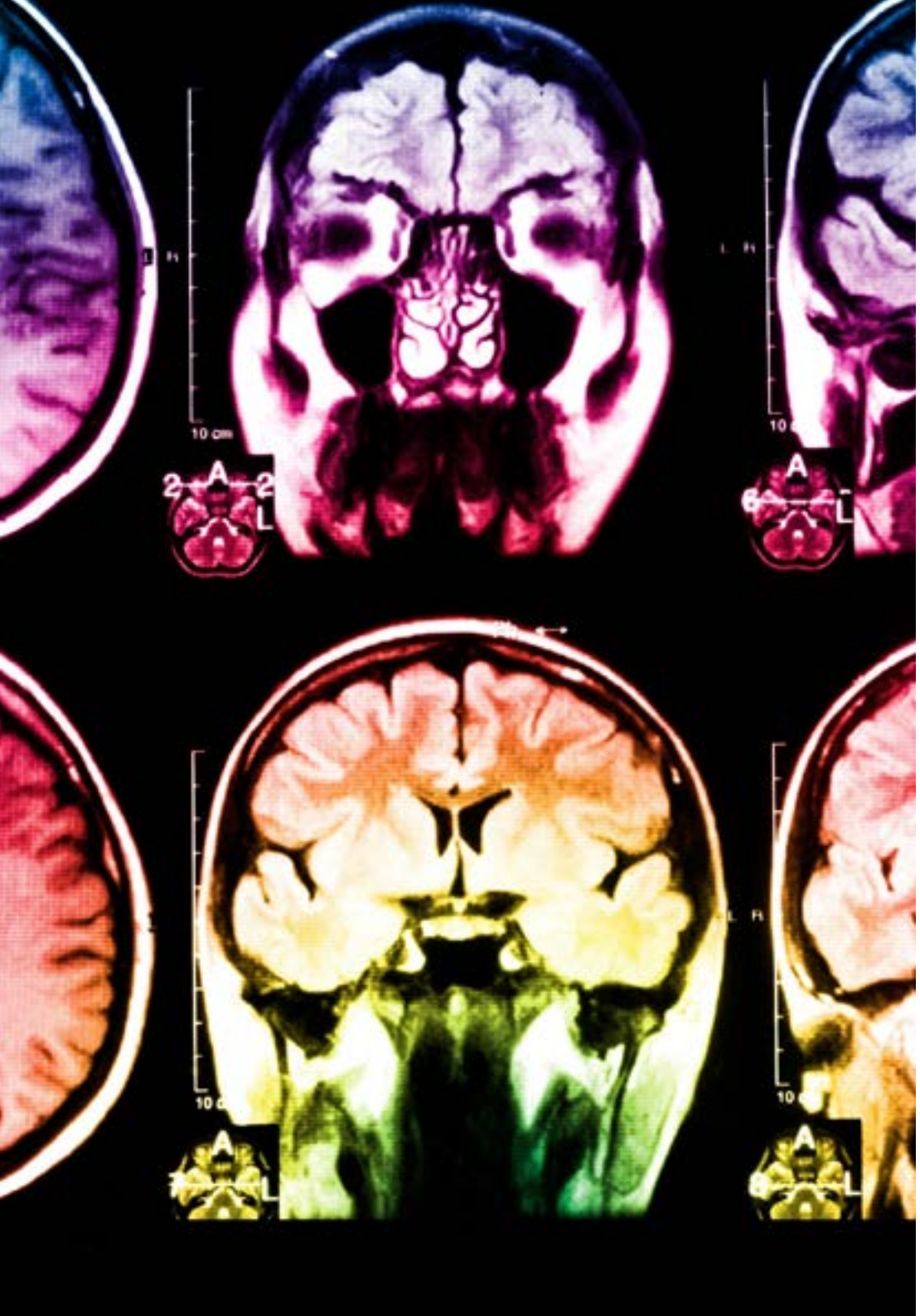
4 The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

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.



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.

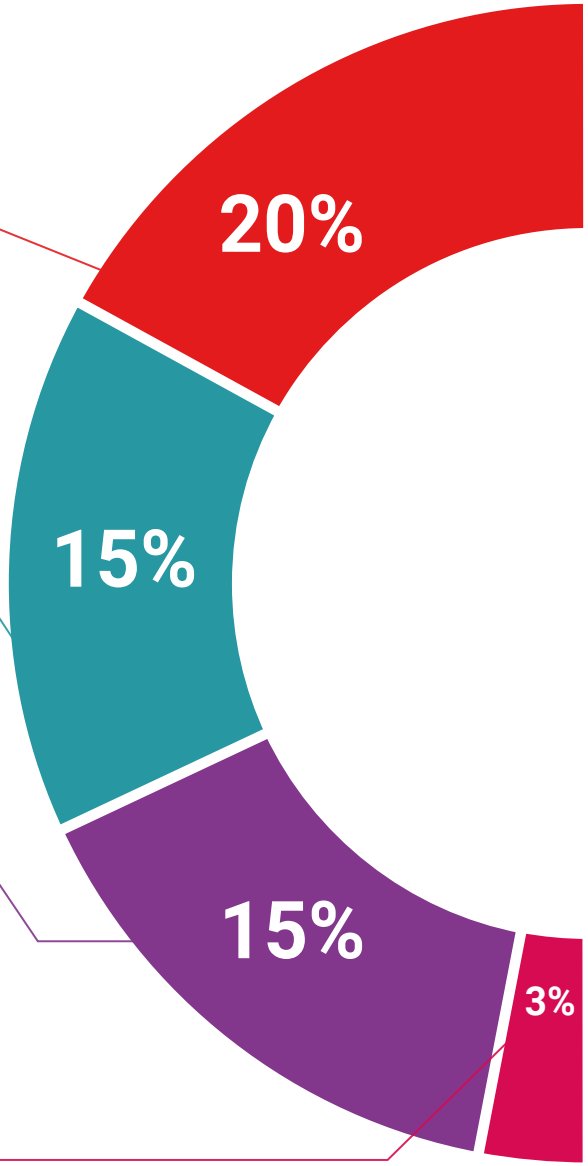
Interactive Summaries

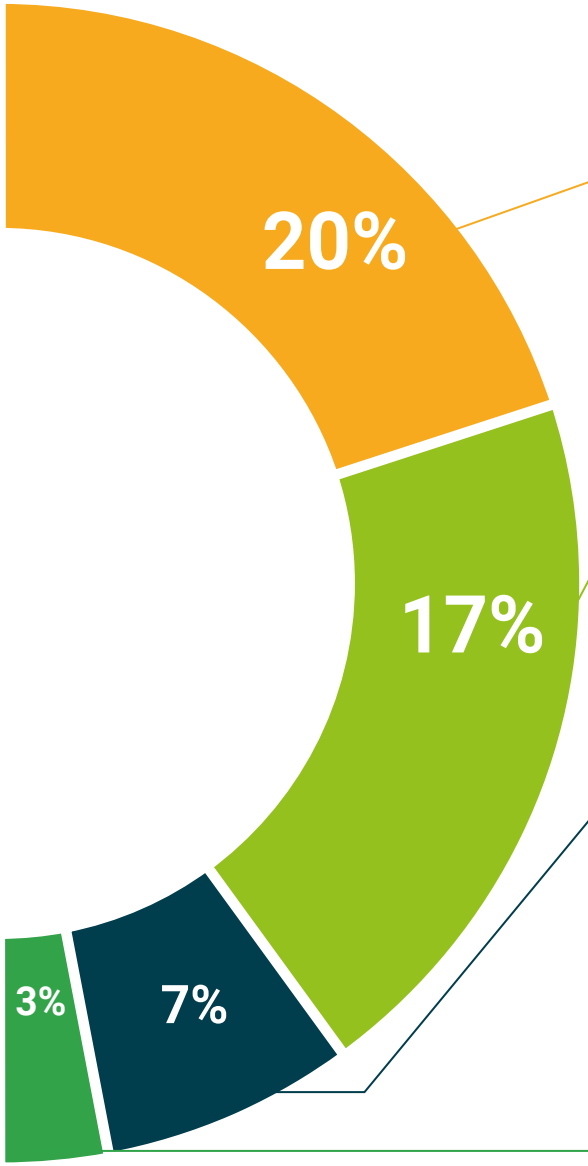
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.

Learning from an expert strengthens knowledge and memory, and generates confidence in our difficult future decisions.

Quick Action Guides

We provide you with the most relevant content of the course in worksheets or quick action guides. A synthetic, practical and efficient way to help you progress in your learning.

06

Certificate

The Postgraduate Diploma in Swine Production and Health guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Technological University.

Successfully complete this program and receive your university title without the hassle of travel or paperwork"

This **Postgraduate Diploma in Swine Production and Health** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma issued** by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will specify the qualification obtained through the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Swine Production and Health**

ECTS: **18**

Official Number of Hours: **450 hours.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Swine Production and Health

This is a qualification awarded by this University, with 18 ECTS credits and equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

In the even that the student wishes to have their paper diploma issued with a Hague Apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Diploma
Swine Production and Health

Course Modality: **Online**
Duration: **6 months.**
Certificate: **TECH Technological University**
18 ECTS Credits
Teaching Hours: **450 hours.**

Postgraduate Diploma
Swine Production and Health

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