Postgraduate Diploma
Epidemiology in Animal Health

tech technological university

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Postgraduate Diploma
Epidemiology in Animal Health

Course Modality: **Online**
Duration: **6 months**
Certificate: **TECH Technological University**
Official Nº of hours: **450 h.**
Website: **www.techtitute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-epidemiology-animal-health**

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01

Introduction

The program in Epidemiology in Animal Health is designed for the veterinary professionals and other related professionals to acquire specialized knowledge in relation to the One Health concept. With this training, the professional will be able to identify those processes related to the public health impacts of veterinary medicine (such as zoonotic diseases and antibiotic resistance) and food safety. Knowledge that will be completed with the highest efficiency in the field of Ecology, the laws of nature and the interaction between human communities and their natural, social and cultural environment.

A high-quality program that will propel you to the highest levels in the industry.

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"

The globalization that has emerged in recent years and its relationship with animal health and, therefore, with public health, is a topic of worldwide interest. The increase in international trade and structural changes in the State have favored the emergence and spread of global health phenomena that represent risks, challenges and opportunities for producers and consumers. This is turn has posed serious challenges for health agencies, professionals and educational institutions.

Within the concept of globalization where this module arises, the student will be able to analyze the concept of "One Health", examining the contribution of veterinarians to this concept which is of such great importance on a global level. Similarly, the veterinarian will identify organizations such as FAO and OIE and their functions.

The rational use of natural capital in any profession requires the training of highly competitive professionals with clear bioethical principles, knowledge of the laws of nature and who are committed to sustainable human development.

The first part of the module analyzes the different implications of ecology in animal health by analysing population ecology, environmental impact and the use of natural resources in sustainable development in different animal species of economic importance and wild species.

The second part of the module - "Animal Welfare" - focuses on the different implications of the well-being of animals. This part of the module aims to provide the professional with specialized knowledge about the proper functioning of the organism, the behavioral state, and the requirements and needs, focused on the measurement of Wellness.

It also develops the necessary skills to provide advice and guidance on the various aspects related to the science of Animal Welfare, analyzing the scientific, legislative and ethical foundations.

The veterinary professional will be able to propose preventive measures, as well as to solve the main problems generated by welfare deficiencies in different animals.

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

- 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
- Self-regulating 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 forums
- 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 the course

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

Develop tools and competencies of a cognitive, communicative, and specific professional nature, for the evaluation, assessment, measurement, and solution of problems related to animal welfare"

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 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.

The efficiency of the methodological design of this Postgraduate Diploma, 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 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.

02

Objectives

Our objective is to train highly qualified professionals for the working world. An objective that is complemented, moreover, 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.

A complete and total update in Epidemiology in Animal Health with the most complete and effective training program in the online educational market"

General Objectives

- Develop specialized knowledge in the field of animal production and health
- Analyze the impact of livestock production on public health
- Examine the concept of globalization
- Justify the term "One Health" and its relationship with veterinary medicine
- Analyze which are the competent authorities from the veterinarian's point of view
- Specify which communications should be made to the competent authorities
- Develop advanced skills and knowledge in veterinary epidemiology
- Provide advanced knowledge in the analysis of epidemiological causes, associations, patterns, trends, and risks
- Apply the skills acquired in the design of strategies for the prevention and control of infections/diseases of veterinary relevance
- Analyze the levels of organization of living beings in interaction with the environment: Individuals, populations, communities, and ecosystems of the biosphere
- Provide tools and competencies of a cognitive, communicative and specific professional nature, for the evaluation, assessment and solution of problems related to animal welfare
- Train veterinarians of a high professional level to be able to apply the knowledge obtained with a high sense of ethics, responsibility, social commitment, and care for the environment to promote and contribute to the solution of local, national and international problems related to animal welfare
- Develop tools and competencies of a cognitive, communicative, and specific professional nature, for the evaluation, assessment, measurement, and solution of problems related to animal welfare

Specific Objectives

Module 1. Important Aspects of Animal Production and Health

- Determine the biosecurity measures in livestock production
- Analyze the veterinary controls to be carried out at border control
- Identify zoonotic diseases and their communication to the authorities
- Classify antibiotics according to their group of use in animals within the framework of antibiotic resistance
- Determine the competent bodies in the field of animal health
- Specify which notifications should be made to the competent authority and in what way
- Analyze the different animal identification systems depending on the species in question
- Develop specialized knowledge on livestock diseases whose declaration is mandatory
- Examine the existing innovations in animal health and the perspectives of the field

Module 2. Epidemiology in Animal Health

- Compile advanced knowledge in epidemiology
- Provide specialist training for the professional related to the field of animal health in the design of experiments and epidemiological studies
- Develop specialized knowledge in the statistical analysis of data in veterinary epidemiology
- Provide specialist training to students in the use of specific software for epidemiology
- Develop skills in spatial epidemiology
- Develop skills in the design of veterinary health prevention and control strategies
- Develop skills in the design of veterinary health management

Module 3. Ecology and Animal Welfare

- Develop analytical skills and critical judgment through the study of ecological problems
- Develop the basic concepts of ecology, structure, and functioning
- Promote innovation as a development tool in animal welfare
- Develop specialized knowledge in animal welfare committed to sustainable development
- Strengthen social-ethical processes with viable, effective, and efficient solutions in the field of animal welfare
- Provide specialist training to students in animal welfare, trained and committed to sustainable development and the environment
- Encourage the creation and development of innovation programs in animal welfare
- Strengthen ethical, technical, and social processes to generate viable, effective, and efficient solutions in animal welfare with a focus on "One Health, One Welfare"
- Promote social awareness processes focused on the creation of short-term solutions for the application of animal welfare

Update your knowledge through this program in Epidemiology in Animal Health"

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 fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.

A path to help you achieve specialized knowledge and professional growth that will put you in a more competitive position in the job 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; 2007-2008) and at Neiker-Tecnalia (Derio, Biscay; 2008-2010)
- 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

Dr. Sarmiento García, 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 (2017-Present)
- 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

Dr. Gómez Castañeda, Irma

- Doctoral candidate. Veterinarian and Zootechnician
- President of the World Network of Veterinary Specialists in Animal Welfare
- General Director of the Animal Welfare Institute, Puebla (Mexico)
- One of the 5 veterinarians in Mexico with simultaneous double recertification, granted by CONCERVET (Certification Council in Veterinary Medicine), both in Ethology and Animal Welfare, as well as in Dog and Cat Medicine
- Master in Clinical Veterinary Ethology and Animal Welfare from Complutense University of Madrid (UCM)
- Postgraduate in Veterinary Clinical Neurology from the Catholic University of Salta (Argentina)
- Master in Education and Doctorate in Education from the UAT (Argentina)
- Graduate in Animal Welfare and Behavioral Medicine from the Latin American Veterinary College of Animal Welfare and Behavioral Medicine Certificate in Animal Behaviour and Welfare, The University of Edinburgh, The Royal School of Veterinary Studies, International Center for Animal Welfare Education. Scotland, United Kingdom
- Training in Forensic Veterinary Medicine, Animal Law, and Criminalistics from the Annual Training Program Bogotá, Colombia. Certified in Psychological First Aid
- Teacher, Researcher, and thesis director in Ethology, Clinical Ethology and Animal Welfare for Undergraduate and Postgraduate Courses, Universidad Autónoma de Barcelona (Spain)

Dr. Romero Castañón, Salvador

- Veterinarian and Zootechnician graduated from the Benemérita Universidad Autónoma de Puebla (Mexico)
- Master of Science in Natural Resources and Rural Development, Colegio de la Frontera Sur (Mexico)
- PhD student in Agricultural and Environmental Sciences
- PhD Student in Agricultural and Environmental Sciences at the Instituto de Investigación en Recursos Cinegéticos (IREC), Castilla-La Mancha University (UCLM)(Spain)
- Completed training stays at the University of Nebraska, USA, and at the Cayetano Heredia University in Peru
- Professor-Researcher at the Faculty of Veterinary Medicine and Animal Husbandry of the Benemérita Universidad Autónoma de Puebla, in addition to having work experience in Zoos and as a Technical Advisor in Hunting Centers in Mexico (2007- present)
- Member of the IUCN Deer Specialist Group
- His line of research has focused on in situ management for the conservation of Aild Ungulates, focusing on Conservation Medicine and shared diseases between Domestic and Wild Animals

Dr. Giesen, Christine

- Resident Doctor of Preventive Medicine and Public Health at Infanta Sofía University Hospital. San Sebastián de los Reyes (Madrid)
- Degree in Medicine, Complutense University of Madrid
- Master of Business Administration, Pharmaceutical Industry and Biotechnology, UDIMA
- Master's Degree in Tropical Medicine and International Health, Autonomous University of Madrid
- Maste's Degree in Public Health, National School of Health - Carlos III Institute, Madrid
- Master's Degree in Development Cooperation, National University of Distance Education, Madrid

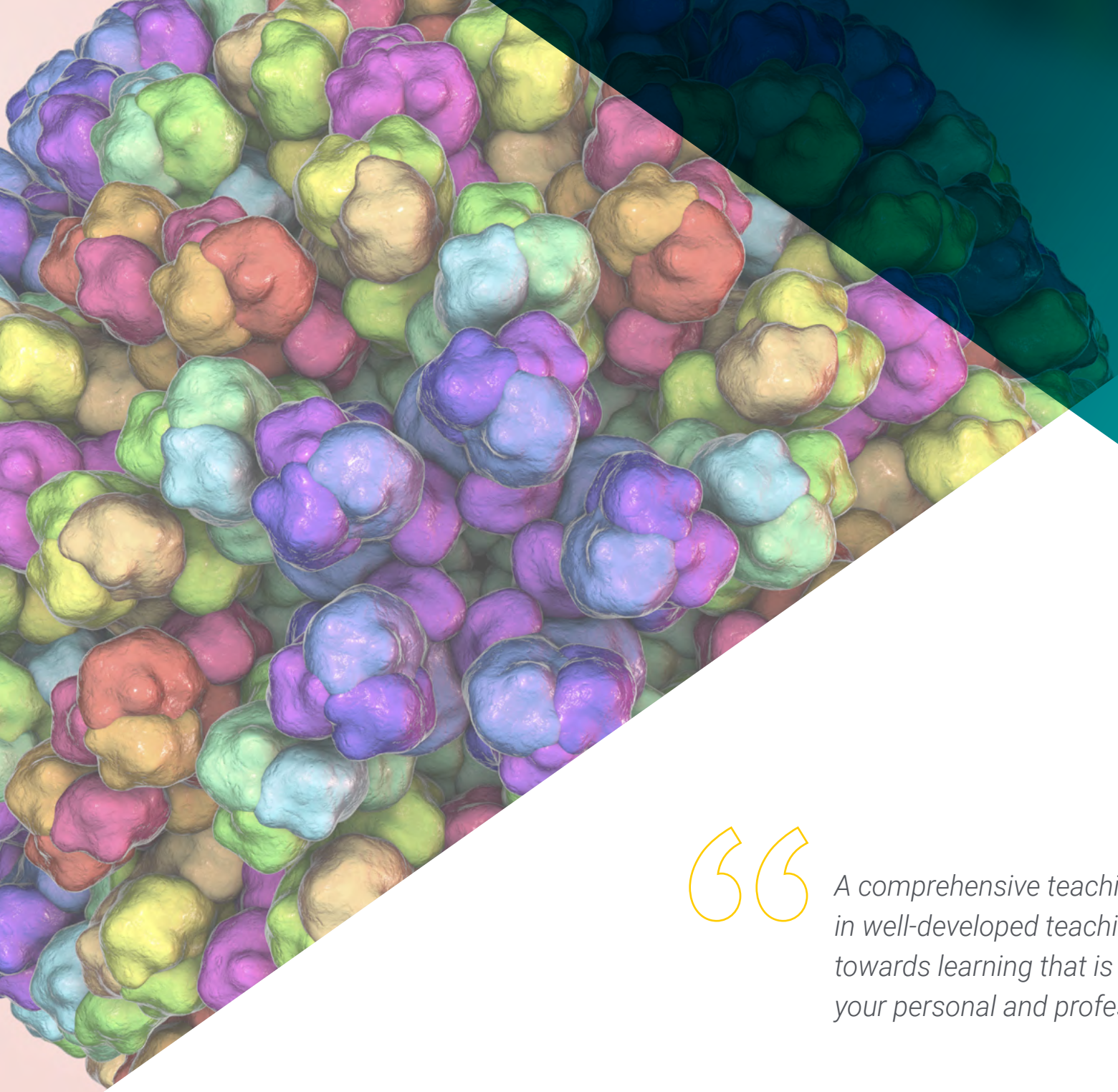
An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed"

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 field.

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. Important Animal Production and Health Aspects

1.1. Animal Production
- 1.1.1. Introduction
- 1.1.2. Current Situation of the Sector
- 1.1.3. Role of the Veterinarian

1.2. Animal Production Systems
- 1.2.1. Intensive
- 1.2.2. Alternative Systems
  - 1.2.2.1. Extensive Production
  - 1.2.2.2. Ecological Production

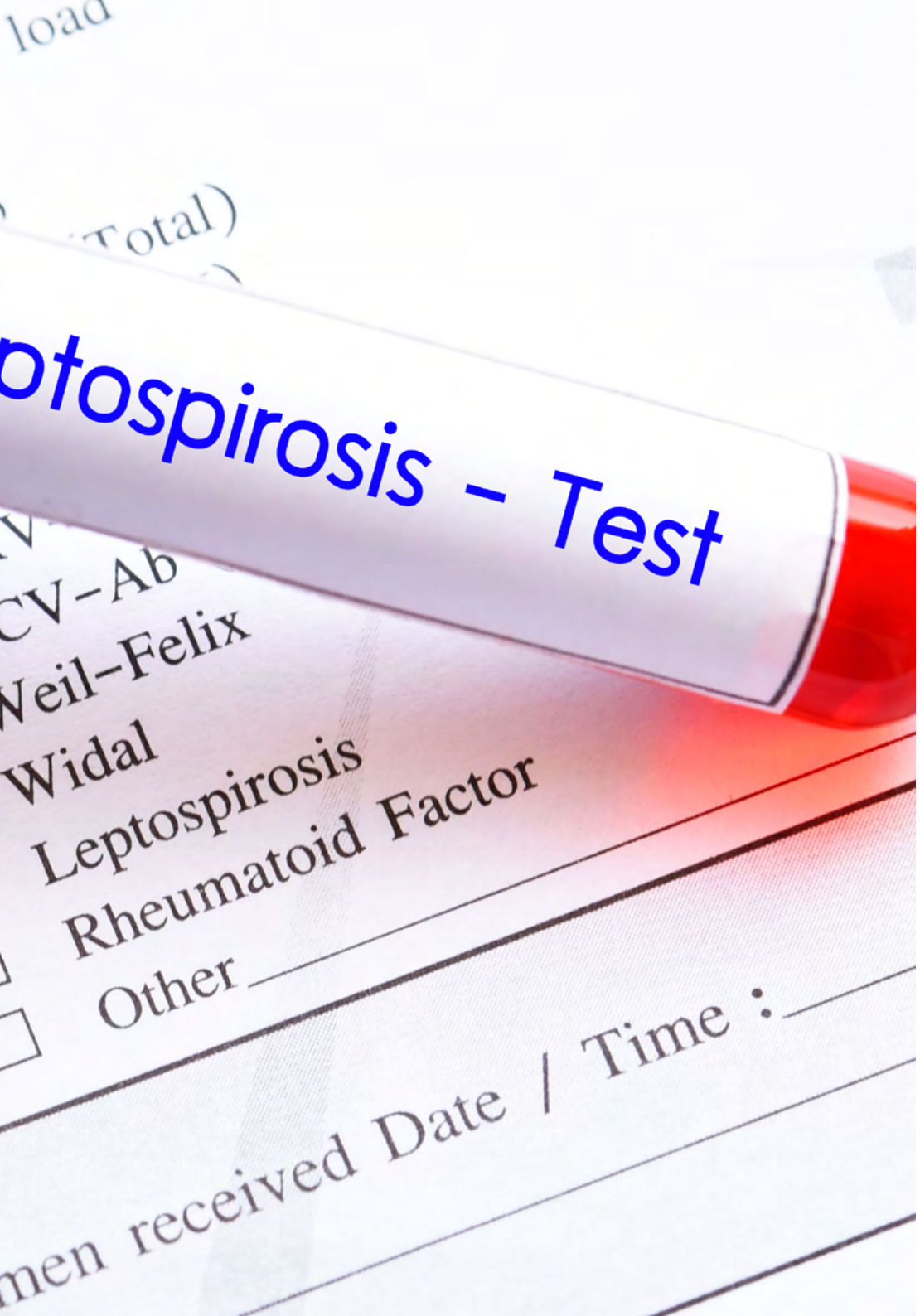
1.3. Livestock Production
- 1.3.1. Biosecurity Measures
- 1.3.2. Vaccination and Treatment Plans

1.4. Health in the Livestock Sector
- 1.4.1. Concept of Animal Health
- 1.4.2. Animal Identification Systems
- 1.4.3. Movements of Animals For Slaughter

1.5. Animal Welfare
- 1.5.1. Current Situation
- 1.5.2. Animal Welfare Measures

1.6. Impacts of Livestock Production on Public Health
- 1.6.1. Concept of One Health
- 1.6.2. Zoonotic Diseases
  - 1.6.2.1. Main Zoonotic Diseases
  - 1.6.2.2. Declaration to the Competent Authority
- 1.6.3. Resistance to Antibiotics
  - 1.6.2.1. Importance of Antibiotic Resistance
  - 1.6.2.2. Categorization of Antibiotics from the Point of View of their Use in Animals

1.7. Impact of Animal Production on Food Safety
- 1.7.1. Food Safety
- 1.7.2. Major Foodborne Diseases
- 1.7.3. Declaration



1.8. Notifiable Diseases of Livestock
- 1.8.1 Introduction
- 1.8.2. Main Diseases
- 1.8.3. Notification

1.9. Competent Veterinary Medicine and Animal Health Authorities
- 1.9.1. Introduction
- 1.9.2. National Veterinary Corps
- 1.9.3. Regional Offices and Veterinary Units

1.10. Reference Laboratories
- 1.10.1. Introduction
- 1.10.2. Sensitivity and Specificity
- 1.10.3. Sample Collection Tables

Module 2. Epidemiology in Animal Health

2.1. Concepts and Basis of Epidemiology
- 2.1.1. Basic Concepts in Epidemiology
- 2.1.2. The Individual and the Population
- 2.1.3. Basic concepts of Population Monitoring
- 2.1.4. Causality and Association
- 2.1.5. Basic Pathology Concepts
- 2.1.6. Epidemiology and Demography
- 2.1.7. Disease and Infection Patterns
- 2.1.8. Uncertainty in Epidemiology

2.2. Experimental Design in Epidemiology
- 2.2.1. Data Collection in Epidemiology
- 2.2.2. Sampling Design
- 2.2.3. Stratification, Representativeness, Balance
- 2.2.4. Types of Epidemiological Sampling
- 2.2.5. Sample Size Estimates
- 2.2.6. Sampling Biases

2.3 Descriptive Epidemiology I. Theoretical Bases
- 2.3.1. Epidemiological Research
- 2.3.2. Types of Observational Epidemiological Studies
- 2.3.3. Types of Epidemiological Variables

2.3.4. Descriptive Parameters
2.3.5. Measures of Dispersion
2.3.6. Probability Distributions
2.3.7. Epidemic Curves, Cycles, and Trends
2.3.8. Development of Hypotheses
2.4 Descriptive Epidemiology II Data Analysis
2.4.1. Open-Access Epidemiological Software
2.4.2. Sample Size Estimates
2.4.3. Probability Distribution Analysis
2.4.4. Descriptive Analysis
2.4.5. Association Analysis
2.4.6. Applications to Diagnostic Tests
2.4.7. Analysis of Absence of Disease/Infection
2.5 Analytical Epidemiology I. Theoretical Basis
2.5.1. Basis of Analytical Epidemiology
2.5.2. Hypothesis Analysis
2.5.3. Epidemiological Parameters
2.5.4. Independence of Observations
2.5.5. Case-control Studies
2.5.6. Cohort Studies
2.5.7. Experimental Studies
2.5.8. Basis of Multivariate Analysis
2.6. Analytical Epidemiology II Data Analysis
2.6.1. Estimates of Association in Case-Control Studies
2.6.2. Estimates of Association in Cohort Studies
2.6.3. Inference in Experimental Studies
2.6.4. Biases and Limitations in Analytical Epidemiology
2.6.5. Multivariate Analysis
2.7. Analysis of Risk Factors
2.7.1. Definition of Risk Factor
2.7.2. Multi-disciplinarity in Risk Factor Analysis
2.7.3. Qualitative Risk Analysis
2.7.4. Quantitative Risk Analysis
2.7.5. Applications of Mathematical Modeling in Risk Analysis
2.8. Spatial Epidemiology
2.8.1. Basis of Spatial Epidemiology
2.8.2. Contagiousness, Transmission, and Basic Reproductive Rate
2.8.3. Spatial Connectivity
2.8.4. Spatial Dispersal Patterns
2.8.5. Molecular Epidemiology
2.8.6. Disease/Infection Maps
2.8.7. Spatial Correlation Studies
2.8.8. Cluster Analysis
2.8.9. Network Analysis
2.9. Applications of Epidemiology for Prevention and Control
2.9.1. Design of Risk-Based Prevention Strategies
2.9.2. Design of Biosecurity Measures
2.9.3. Control of Risk Factors
2.9.4. Mathematical Models applied to Prevention and Control
2.10. Veterinary Health Management
2.10.1. Epidemiological Surveillance Concepts and Systems
2.10.2. Concepts in Veterinary Health Management
2.10.3. Hygiene and Prevention
2.10.4. Zoning

Module 3. Ecology and Animal Welfare

3.1. Introduction to Ecology
3.1.1. Ecology Definition
3.1.2. Abiotic Factors
3.1.3. Biotic Factors
3.1.4. Population
3.1.5. Community
3.2. Population Ecology.
3.2.1. Reproductive Patterns
3.2.2. Extinction
3.2.3. Biogeography
3.2.4. Interspecific Competition

3.3. Environmental Impact
- 3.3.1. Definition
- 3.3.2. Causes of Environmental Deterioration
- 3.3.3. Population Growth
- 3.3.4. Consumerism

3.4. Natural Resources
- 3.4.1. Renewable and Non-Renewable Resources
- 3.4.2. Alternative Energy Sources
- 3.4.3. Protected Areas
- 3.4.4. Sustainable Development

3.5. General Aspects of Animal Welfare
- 3.5.1. Concept of Animal Welfare
  - 3.5.1.1. Introduction
  - 3.5.1.2. History
- 3.5.2. Definitions of Animal Welfare
  - 3.5.2.1. Historical Definitions of Animal Welfare
- 3.5.3. Impact of the Environment on Animal Welfare
- 3.5.4. Health Alert Plans
- 3.5.5. Physiology and Biochemistry
  - 3.5.5.1. Introduction
- 3.5.2. Physiology
- 3.5.3. Biochemistry
- 3.5.4. The Five Animal Needs
  - 3.5.4.1 Suitable Environment
  - 3.5.4.2 Adequate Diet
  - 3.5.4.3 Normal Behavior
  - 3.5.4.4 Adequate Housing
  - 3.5.4.5 Pain, Suffering, Injury and Illness
- 3.5.5. Stress and Animal Welfare
  - 3.5.5.1. Relationship between Stress and Animal Welfare
- 3.5.6. Social Aspects of Animal Welfare
- 3.5.7. Principles of Animal Welfare
  - 3.5.7.1. What are the Basic Principles of Animal Welfare?
- 3.5.8. Assessment of Animal Welfare
  - 3.5.8.1. Important Aspects to evaluate Animal Welfare

3.6. Animal Behavior
- 3.6.1. Applied Ethology
  - 3.6.1.1. What is Ethology?
  - 3.6.1.2. Application of Ethology
- 3.6.2. Learning and Social Behavior
  - 3.6.2.1. Types of Behavior
  - 3.6.2.2. Social Behavior
- 3.6.3. Biology of Animal Suffering
- 3.6.4. Food
- 3.6.5. Normal and Abnormal Behavior Patterns
  - 3.6.5.1 Normal Behaviors
  - 3.6.5.2 Abnormal Behaviors
- 3.6.6. Interactions between groups of Animals
  - 3.6.6.1 Types of Interactions
- 3.6.7. Causes of Stress
  - 3.6.7.1. Types of Interactions
  - 3.6.7.2. Stressors
  - 3.6.7.3. Physiological Responses to Stress
- 3.6.8. General Adaptation Syndrome
- 3.6.9. Animal Sense Organs in relation to Stress and Injury
  - 3.6.9.1. Introduction
  - 3.6.9.2. Sensory Organs
- 3.6.10. Animal Welfare and Ethology
  - 3.6.10.1. Introduction
  - 3.6.10.2. Relationship of Sciences in Animal Welfare

3.7 One Health
- 3.7.1. One Welfare, One Health
  - 3.7.1.1. Introduction to One Health
  - 3.7.1.2. Economic and Environmental Benefits
  - 3.7.1.3. Health Benefits
- 3.7.2. International Animal Welfare Standards
- 3.7.3. World Organization for Animal Health (OIE)
- 3.7.4. OIE International Standards
- 3.7.5. Food and Agriculture Organization of the United Nations (FAO)

3.7.6. World Animals Protection (WAP)
3.7.7. Animal Welfare Standards on the Farm
3.7.8. International Consumers
3.7.9. Welfare Quality Project
3.7.9.1. Introduction
3.7.9.2. Types of Valuations
3.7.10. Animal Welfare Labeling
3.8. Legislation
3.8.1. Animal Ethics and Legislation
3.8.1.1. Introduction
3.8.1.2. Veterinary Ethics in Animal Welfare
3.8.2. National and International Legislation on Animal Welfare
3.8.3. Animal Welfare Legal Framework
3.8.4. Specific Legislation on Animal Welfare in Farms
3.8.5. Legislation Related to Religious Rites
3.8.6. Regulations in this Area
3.8.7. Economic Importance of Implementing Animal Welfare legislation
3.8.8. Proposals in Administrative-Criminal Matters
3.8.9. Animal Welfare, Protection, and Law in Legislation
3.8.10. Directives, Standards, and Protocols
3.9. Animal Welfare Indicators
3.9.1. Types of Indicators
3.9.2. Biomarkers of Stress as Indicators of Animal Welfare
3.9.2.1. Types of Indicators
3.9.3. Welfare Assessment Protocols
3.9.4. Criteria for Animal Welfare Assessment
3.9.5. Animal Welfare Problems and their effects on Animal Health and Productivity
3.9.6. Health
3.9.7. Diseases
3.9.8. Physiology and Biochemistry
3.9.9. Productivity
3.9.10. Stressors
3.9.10.1. Introduction
3.9.10.2. Types of Stressors
3.10. Welfare in the Different Species
3.10.1. Animal Welfare in Production
3.10.2. Laboratory Animal Welfare
10.10.2.1. Experimental Animals
3.10.3. Animal Welfare in Dogs
3.10.4. Animal Welfare in Cats
3.10.5. Animal Welfare in Exotic Species
3.10.5.1. Exotic Animals in Zoos
3.10.5.2. Unconventional Animals
3.10.6. Animal Welfare in Pigs
3.10.7. Animal Welfare in Hens
3.10.8. Environmental Enrichment
3.10.8.1. Types of Enrichment
3.10.8.2. Food Enrichment
3.10.8.3. Social Enrichment
3.10.8.4. Sensory Enrichment
3.10.9. Biosafety
3.10.10. Mutilations
3.10.10.1. Introduction
3.10.10.2. Types of Mutilations

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

This teaching system is used, for example, 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 Relearning, 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

What should a professional do in a given situation? 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 an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will 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 power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a 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:

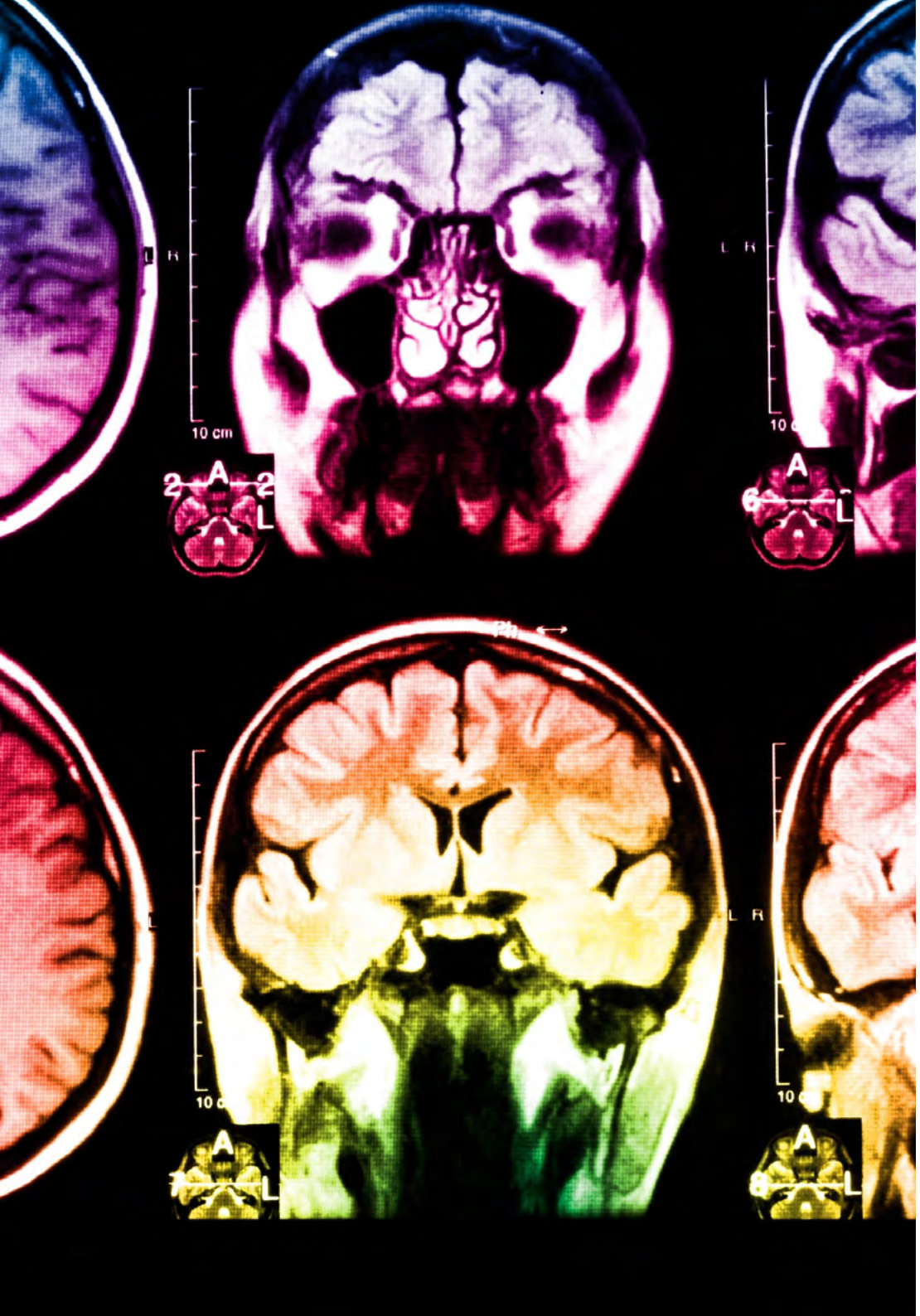
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real 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.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This 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, a real revolution with respect to the mere study and analysis of 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 Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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

Relearning 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 for success.

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

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

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

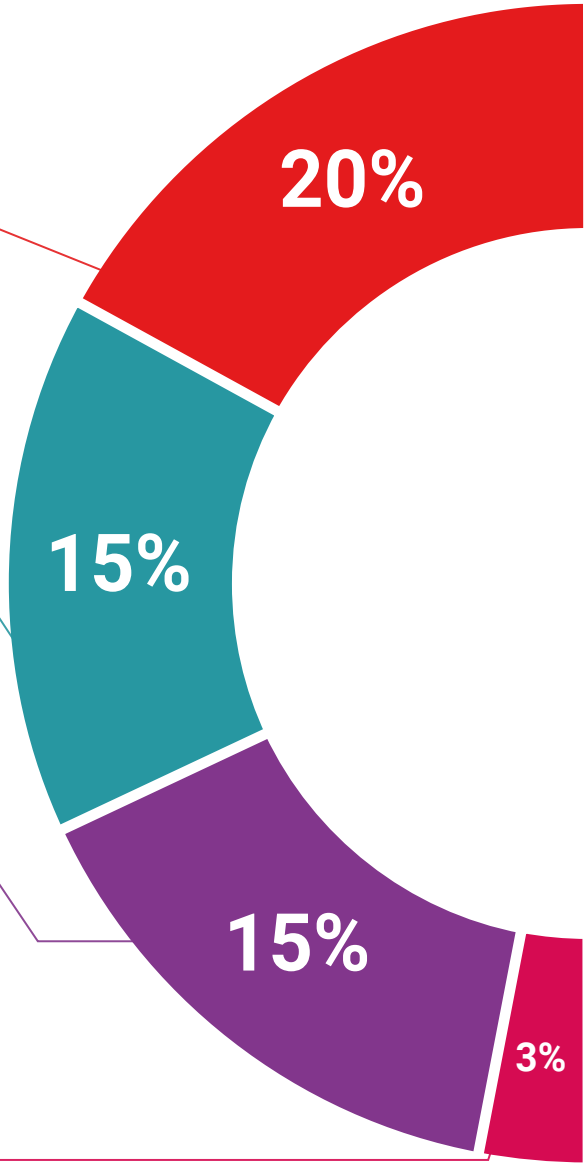
Interactive Summaries

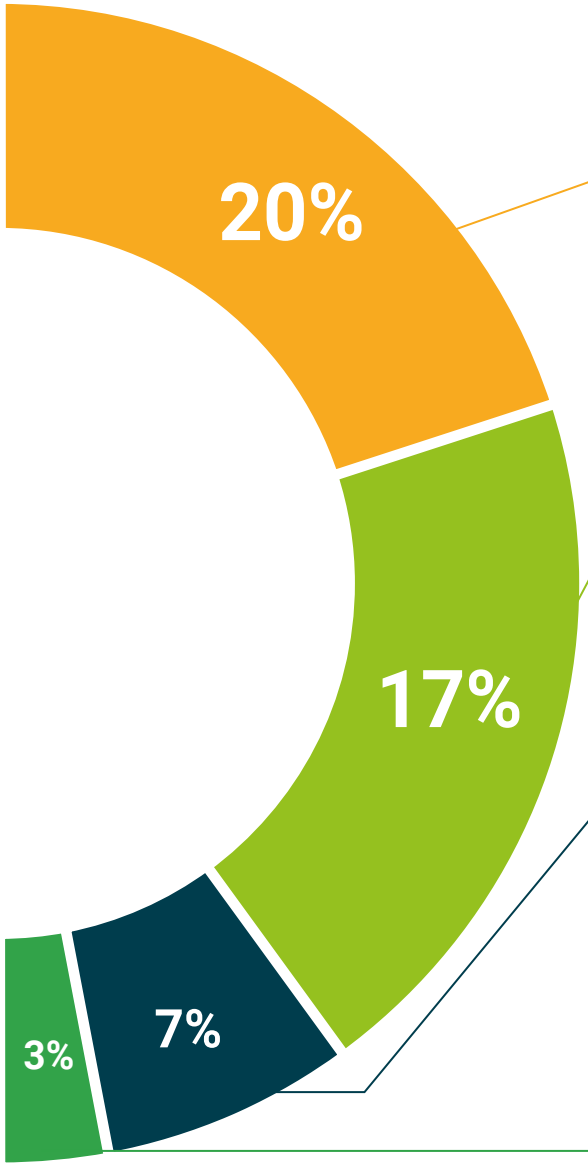
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their 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 future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

06

Certificate

The Postgraduate Diploma in Epidemiology in Animal 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 degree without travel or laborious paperwork"

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

After students have passed the assessments, they will receive their **Postgraduate Diploma** issued by **TECH Technological University** and sent by certified mail*.

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

Title: **Postgraduate Diploma in Epidemiology in Animal Health**

Official Nº of hours: **450 h.**

tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Epidemiology in Animal Health

This is a qualification awarded by this University, 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

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

Postgraduate Diploma
Epidemiology in Animal Health

Course Modality: **Online**
Duration: **6 months**
Certificate: **TECH Technological University**
Official Nº of hours: **450 h.**

Postgraduate Diploma
Epidemiology in Animal Health

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