Postgraduate Certificate
Abdominal Ultrasound
in Small Animals

tech technological university

Postgraduate Certificate

Abdominal Ultrasound in Small Animals

Course Modality: **Online**

Duration: **2 months.**

Certificate: **TECH - Technological University**

12 ECTS Credits

Teaching Hours: **300 hours**

Website: **www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/abdominal-ultrasound-small-animals**

Index

01
Introduction

Nowadays, abdominal ultrasound is one of the most-demanded procedures in veterinary consultations. Diagnostic imaging allows professionals to locate possible pathologies and carry out the correct treatment for each case.

Open new doors in your professional development with this effective specialist program"

Abdominal ultrasound has become, together with radiography, a basic diagnostic imaging procedure nowadays and is increasingly performed and demanded in daily clinical practice. It provides us with very relevant and sometimes conclusive information to reach a diagnosis in our patients.

It is an operator-dependent technique, so in order to perform an adequate ultrasound examination and obtain the best results, it is necessary to be meticulous and protocolized. Therefore, it is necessary to master basic criteria prior to performing the ultrasound examination, such as: the general anatomy of the region to be explored, the specific anatomy of each viscera, to locate each structure properly and recognize its physiological ultrasound image which will allow us to identify the pathological image. It is also necessary to understand the specific physiology, to correlate the ultrasound findings with clinical signs, and to establish differential diagnoses (and sometimes definitive) with clinical sense and criteria.

Due to the extensive information provided, this intensive training in abdominal ultrasound has been divided into two modules. The first module will address the correct technique of exploration of the abdominal cavity and each of its structures. We will also perform an in-depth study of the physiological image and the main pathologies of the urinary bladder, ureters, urethra, kidneys, retroperitoneal cavity, female genital tract, gestation, male genital tract and adrenal glands.

In the second module, we will continue to address the correct exploration technique of the abdominal cavity and each of its structures, and will deepen understanding of the identification of the physiological image and main pathologies of the peritoneal cavity, stomach, small intestine, large intestine, spleen, liver, gallbladder, pancreas, abdominal lymph nodes and abdominal masses.

With this specialization you will develop confidence, assurance and greater knowledge of pathologies and differential diagnoses when it comes to providing relevant and necessary information in daily ultrasound practice.

As it is an online Postgraduate Certificate course, students are not restricted by set timetables, nor do they need to physically move to another location. All of the content can be accessed at any time of the day, so you can balance your working or personal life with your academic life.

This **Postgraduate Certificate in Abdominal Ultrasound in Small Animals** 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 the program

As the course is online, you will be able to train wherever and whenever you want, balancing your professional and personal life"

"You will have access to the most advanced didactic resources and the most innovative knowledge in a program that stands out for the quality of its contents and its excellent teaching staff"

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 train and experience 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 program: one of the differential qualities of this training.

This mastery of the subject is complemented by the effectiveness of the methodological design of this **Postgraduate Certificate in Abdominal Ultrasound in Small Animals**. 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** learning: 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.

Tackle the daily challenges you may face in Abdominal Ultrasound in Small Animals with this high-level program designed by and for veterinarians

Specialize in Abdominal Ultrasound in Small Animals with the direct help of renowned professionals. A booming sector due to the growing demand for pets

02
Objectives

The general objective of this program is to update the professional's knowledge on ultrasound procedures in daily practice. For this purpose, the theoretical learning of the subject will be provided, with the most current and interesting contents in this sector.

The most effective resources in online teaching, in a practical, comfortable and high-impact learning"

General Objectives

Module 1.
- Perform a correct ultrasound approach in exploring the abdominal cavity
- Assimilate and reinforce the location and positioning of the viscera, an element in this module.
- Identify the correct scanning technique for each organ
- Correlate the anatomy of the viscera with its physiological ultrasound image.

Module 2.
- Perform a correct ultrasound approach in exploring the abdominal cavity
- Assimilate and reinforce the location and positioning of the viscera, an element in this module.
- Identify the correct scanning technique for each organ
- Correlate the anatomy of the viscera with its physiological ultrasound image.

This specialization course will provide you with the necessary personal and professional skills to use ultrasound scanners correctly"

Specific Objectives

Module 1.
- Master physiological image identification
- Identify and recognize ultrasound findings
- Recognize the main pathologies affecting the previously mentioned organs
- Differentiate between incidental and relative findings
- Establish a correlation between ultrasound findings and clinical signs
- Form the most frequent differential diagnoses
- Propose appropriate complementary tests

Module 2.
- Master physiological image identification
- Identify and recognize ultrasound findings
- Recognize the main pathologies affecting the previously mentioned organs
- Differentiate between incidental and relative findings
- Establish a correlation between ultrasound findings and clinical signs
- Form the most frequent differential diagnoses
- Propose appropriate complementary tests

03

Course Management

Professionals from different areas and skill sets with extensive experience in animal ultrasound will be your tutors throughout this specialist course. A complete multidisciplinary team that stands out for its illustrious professional trajectory and teaching experience.

We have the best teaching team to help you to specialize in a highly-demanded field"

Management

Conde Torrente, María Isabel

- Head of the Diagnostic Imaging and Cardiology Service at Hospital Veterinario Alcor. Currently
- Degree in Veterinary Medicine from the University of Santiago de Compostela in 2012 with a certified European degree
- Advanced Postgraduate Course in Diagnostic Imaging (Computerized Axial Tomography). General Practitioner Advanced Certificate TCESMD. 2019
- Postgraduate General Practitioner Certificate in Diagnostic Imaging (GPCert- DI) 2016
- Professor in Veterinary Practical Training in 2015 as a teacher for the official qualification of veterinary technical assistant
- Gives training courses on clinical and laboratory analysis for veterinarians at Hospital Veterinario Alberto Alcocer
- Medical Director and head of the Advanced Diagnostic Imaging Service at Grupo Peñagrande. Exclusive handling of TC General Electrics TriAc Revolution 16 cuts. (2017-2019)
- Head of the Diagnostic Imaging Service at Centro Veterinario Mejorada. (2016-2017)
- Responsible for diagnostic services at Hospital Veterinario Alberto Alcocer. (2013-2016)
- University of Santiago de Compostela. Department of Animal Pathology. Collaboration with the research group on heavy metal accumulation in bovine meat in collaboration with Cornell University, New York; published in the Journal of Animal Science.

Professors

Dr. Pérez López, Luis Alejandro

- Veterinarian at Davies Veterinary Specialists, UK, since January 2020, member of the Diagnostic Imaging team (Digital Radiology, Ultrasound, CT, MRI and Fluoroscopy).

- Degree in Veterinary Medicine from the University of Córdoba, 2009

- AVEPA (Association of Spanish Specialist Veterinarians of Small Animals) Accredited in Diagnostic Imaging (2020)

- Member of the AVEPA Diagnostic Imaging Group

- Alhaurín El Grande VETSUM Veterinary Hospital (Málaga), from August 2010 to December 2019, responsible for the Diagnostic Imaging Service since 2014, offering Digital Radiology, Ultrasound and CT services

- Radiological and ultrasound diagnosis of foreign body intestinal obstructions in the small intestine of dogs. ESVPS NEWS, No. 6. October 2017.
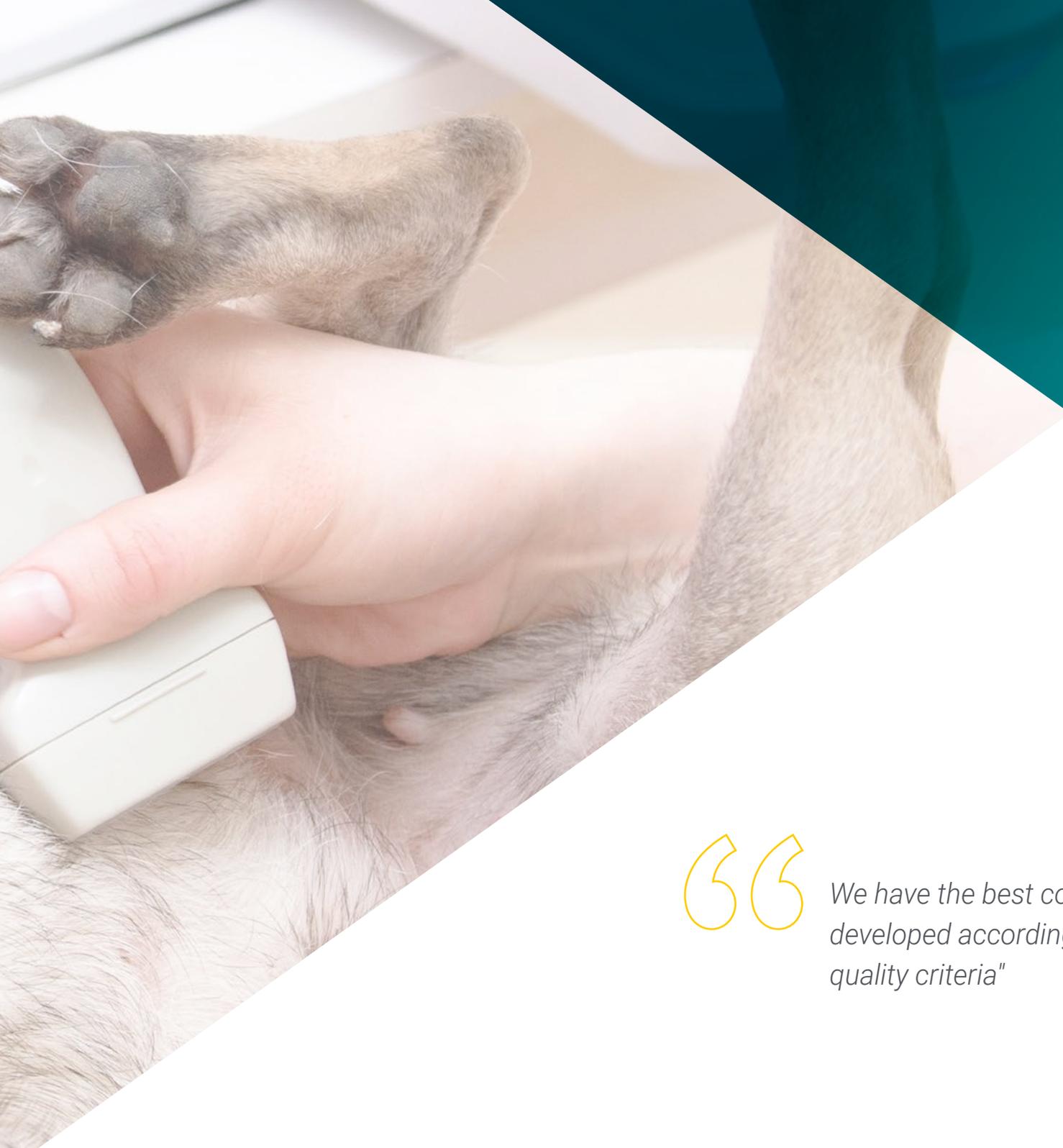 Speaker at national courses in Spain and the United Kingdom

04
Structure and Content

A complete and well-structured program, designed by renowned professionals in the field who will take you to the highest standards of quality and success using ultrasound in your daily practice.

We have the best content of the moment, developed according to the current teaching quality criteria"

Module 1. Abdominal Ultrasound in Small Animals

1.1. Scanning Technique
    1.1.1. Introduction
    1.1.2. Methodology
    1.1.3. Systematization
1.2. Retroperitoneal Cavity
    1.2.1. Introduction
    1.2.2. Limits
    1.2.3. Ultrasound Approach
    1.2.4. Pathologies of the Retroperitoneal Cavity
1.3. Urinary Bladder
    1.3.1. Introduction
    1.3.2. Anatomy
    1.3.3. Ultrasound Approach
    1.3.4. Urinary Bladder Pathologies
1.4. Kidneys
    1.4.1. Introduction
    1.4.2. Anatomy
    1.4.3. Ultrasound Approach
    1.4.4. Kidney Pathology
1.5. Ureters
    1.5.1. Introduction
    1.5.2. Ultrasound Approach
    1.5.3. Ureter Pathology
1.6. Urethra
    1.6.1. Introduction
    1.6.2. Anatomy
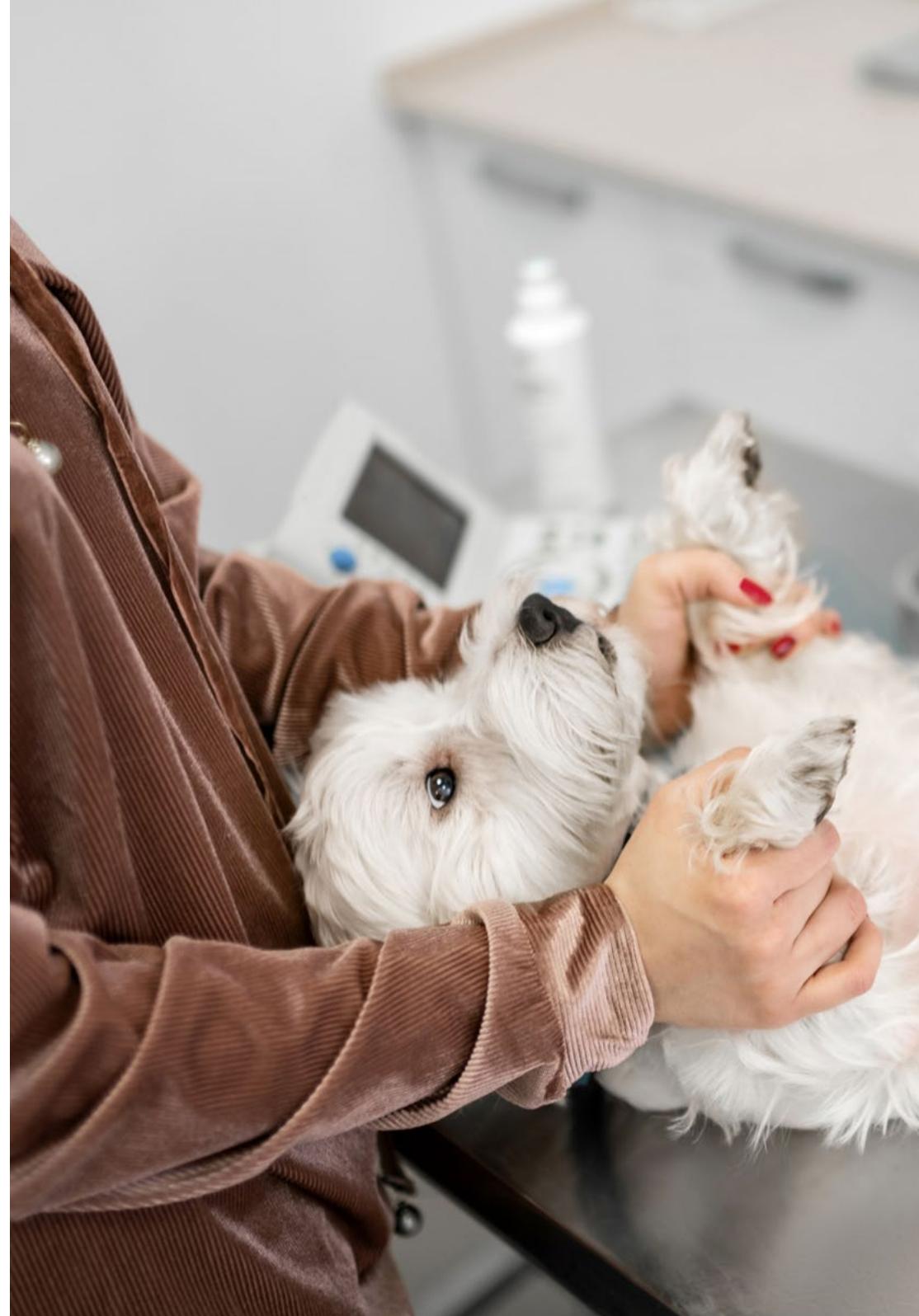   1.6.3. Ultrasound Approach
    1.6.4. Urethral Pathologies

Module 2. Abdominal Ultrasound in Small Animals II

This Postgraduate Certificate in Abdominal Ultrasound in Small Animals will take you through different teaching approaches which will allow you to learn in a dynamic and efficient way"

05
Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: *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.

Successfully complete this training program and receive your university certificate without travel or laborious paperwork"

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*
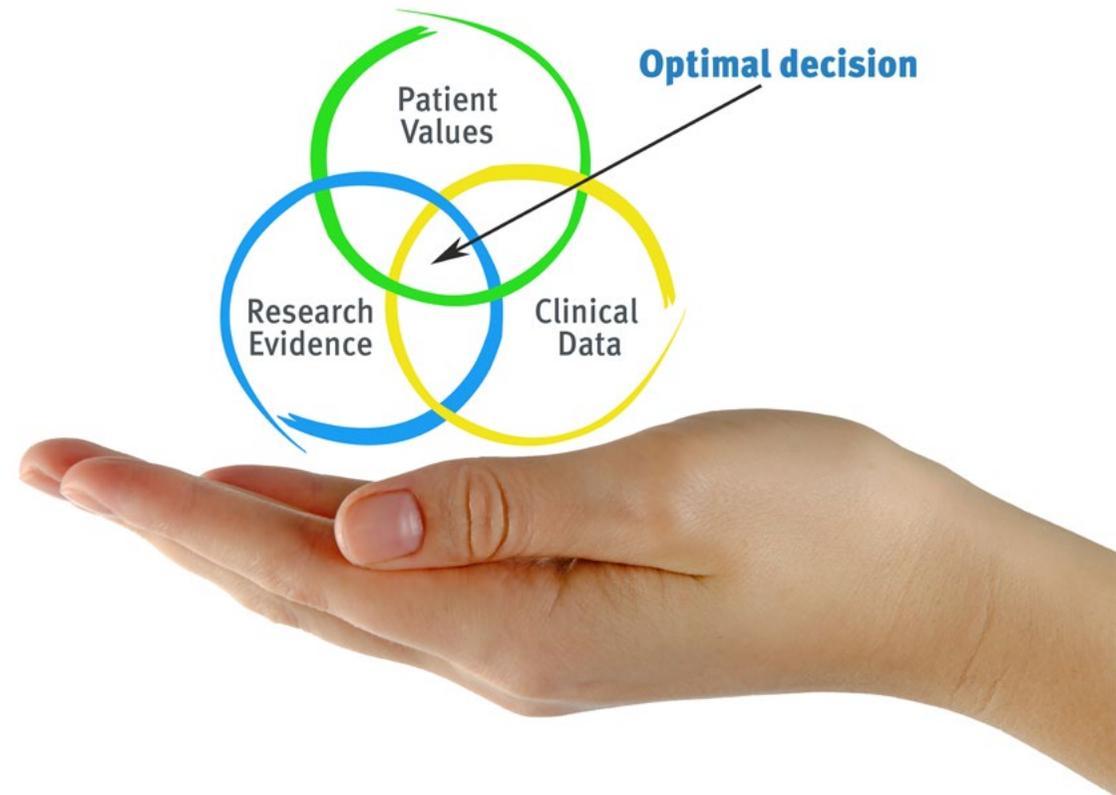
According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching potential or because of its uniqueness or rarity. It is essential 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

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

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.

15%

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".

15%

3%

Additional Reading

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

20%

17%

7%

3%
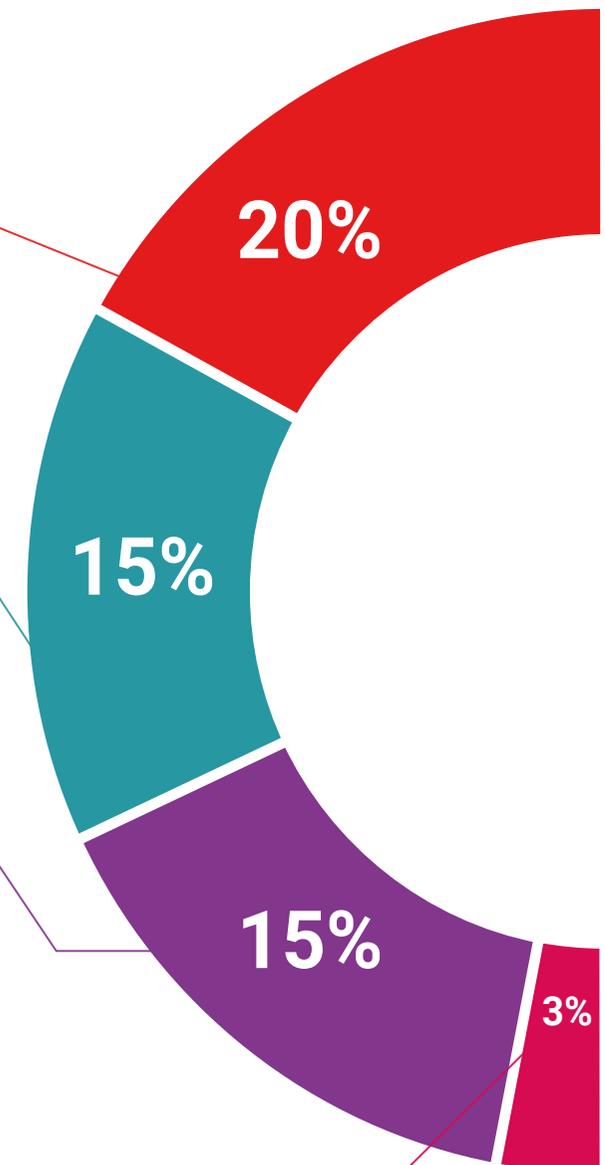
Expert-Led Case Studies and Case Analysis

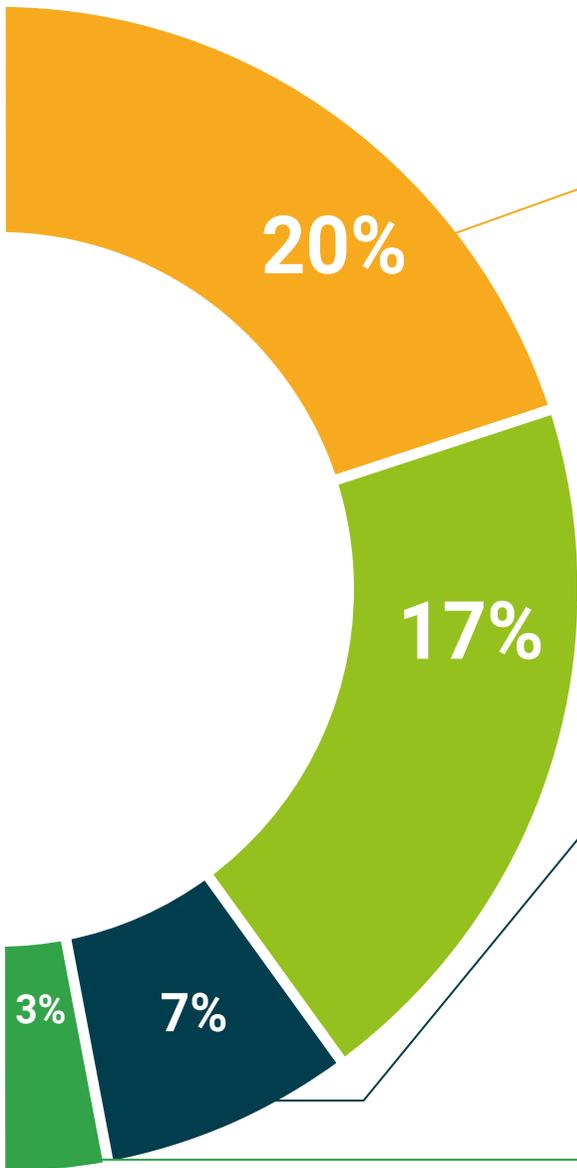Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

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 future difficult decisions.

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.

Certificate

The Postgraduate Certificate in Abdominal Ultrasound in Small Animals guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this training program and receive your university certificate without travel or laborious paperwork"

This **Postgraduate Certificate in Abdominal Ultrasound in Small Animals** contains the most complete and up-to-date scientific program on the market.

After passing the evaluations, the student will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Certificate in Abdominal Ultrasound in Small Animals**

ECTS: **12**

Official Number of Hours: **300 hours.**

tech technological university

Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Abdominal Ultrasound in Small Animals

This is a qualification awarded by this University, with 12 ECTS credits and equivalent to 300 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.

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