

Postgraduate Certificate Diagnostic Techniques in Small Animal Internal Medicine





Postgraduate Certificate Diagnostic Techniques in Small Animal Internal Medicine

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/veterinary-medicine/postgraduate-certificate/diagnostic-techniques-small-animal-internal-medicine

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01

Introduction

Currently, veterinary medicine covers the same range of areas as human medicine, and the range of tests available to the veterinarian in the clinic is just as wide. Because of this, correct selection, evaluation and interpretation become extremely important tasks not only in the diagnosis but also in the follow-up and prognosis of animal patients.





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Upon completion of the program, students will have obtained knowledge that is essential for professional practice, whether they choose to exercise in a clinical, academic or research context”

Internal medicine is the fundamental pillar on which the veterinary profession is based, while it is also closely linked to other specialties. In recent decades, knowledge on the pathophysiology of numerous processes and pathologies in animals has evolved notoriously, as well as that relating to its methodologies, resources and diagnostic techniques. Great advances have also been made in monitoring and therapeutic treatments for these pathologies, which have led to a higher success rate both in terms of effective and early diagnosis of the processes involved as well as patient stabilization and control, which translates into better life quality and extended longevity.

Laboratory and imaging tests merge in the preparation of a cornerstone, fundamental in every veterinary practice, and therefore knowledge of their applications and interpretations is a necessity.

The topics covered in this program have been selected to offer complete, up-to-date and quality specialization in internal medicine, thereby providing students with knowledge that will allow them to safely deal with cases and carry out adequate follow-up, monitoring and therapeutic procedures.

The teaching staff of them is made up of specialists from within different areas of internal medicine with extensive clinical experience. These faculty members have received accreditation as specialists in different fields such as cardiology, ophthalmology, diagnostic imaging, dermatology and oncology, and have often collaborated together in veterinary specialty centers. In addition to providing quality clinical work, some of these experts actively participate in various research projects parallel to their teaching and clinical activities.

This **Postgraduate Certificate in Diagnostic Techniques in Small Animal Internal Medicine** contains the most complete and up-to-date educational program on the market. Its most important features include:

- ♦ Case studies presented by experts Diagnostic Techniques in in Small Animal Internal Medicine
- ♦ The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines, essential for professional development
- ♦ Latest developments in Diagnostic Techniques in Small Animal Internal Medicine
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Special emphasis on innovative methodologies in Small Animal Internal Medicine
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



Our multimedia methodology allows students to perform interactive activities and learn in a more practical way”

“

Each chapter is accompanied by clinical cases that aim to incorporate the knowledge conveyed and includes activities that will allow students to assess their progress”

Its teaching staff includes professionals from the veterinary field, who bring the experience of their work to this training, as well as recognised specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this, the professional will be assisted by an innovative interactive video system created by renowned and highly experienced experts in Diagnostic Techniques in Small Animal Internal Medicine.

This program is organized to allow for logical and intuitive in-depth study, as well as the consolidation of diagnostic, therapeutic and follow up protocols”

Incorporate the latest techniques and treatments in veterinary oncology into your daily practice”



02 Objectives

The Postgraduate Certificate in Diagnostic Techniques in Small Animal Internal Medicine is designed to facilitate the performance of the veterinary professional with the latest advances and most innovative procedures in the field.





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Do not think twice and join our educational community. You'll reach your academic goals in no time”



General Objectives

- Identify parameters that make up a blood analysis
- Differentiate pathological and physiological values
- Examine the affected organ and/or system
- Make correct choice of tests in different clinical situations



This Postgraduate Certificate is unique in its category, which will allow students to acquire specialized knowledge in order to offer high-quality internal medicine services to clients and patients"





Specific Objectives

- ◆ Generate specialized knowledge to interpret analysis and diagnostic imaging test
- ◆ Generate diagnostic plan according to clinical suspicion
- ◆ Elaborate differential diagnosis from a series of analytical and/or imaging results

03

Course Management

The teaching faculty, made up of leading professionals in veterinary medicine with years of experience both in consultation and teaching, will provide detailed information on internal medicine in small animals. A unique opportunity that will help you grow professionally.





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A team of specialists in neurological diseases has been in charge of selecting and creating the most relevant content on this subject”

Management



Ms. PérezAranda Redondo, María

- ◆ Head of the Dermatology Service at Simbiosis Center for Veterinary Specialties Veterinarian at Aljarafe Norte Veterinary Center
- ◆ In charge of the Dermatology and Diagnostic Cytology service August 2017 - October 2019
- ◆ Veterinary clinic at the veterinary center Canitas in Sevilla Este Responsible for the Dermatology and Cytological Diagnostic Service of all Canitas Veterinary Centers April 2015 - July 2017
- ◆ Residency at the Dermatology Department of Veterinary Clinic Hospital - Autonomous University of Barcelona
- ◆ March 16 - March 27, 2015. Veterinarian at "Centro Veterinario Villarrubia" November 2014 - April 2015
- ◆ Official internship at the small animal unit of the Clinical Veterinary Hospital of the University of Cordoba, October 2013 - October 2014
- ◆ Honorary collaborator of the Department of Animal Medicine and Dermatological Surgery with Dr. Pedro Ginel Pérez. Student collaborator of the Department of Animal Medicine and Dermatological Surgery with Professor Dr. Pedro Ginel Pérez during the academic periods: 2010-2011, 2011-2012 and 2012-2013
- ◆ Student intern at the Veterinary Clinic Hospital of the University of Cordoba during the 2011-2012 and 2012-2013 academic periods



Mr. Usabiaga Alfaro, Javier

- ♦ Bachelor's Degree in Veterinary Medicine from the University Alfonso X El Sabio (UAX); collaborating student at the University Veterinary Hospital UAX; rotated through all services of the center (Internal Medicine, Surgery, Anesthesia, Diagnostic Imaging, Emergency and Hospitalization)
- ♦ Master's Degree in Small Animal Medicine and Emergency Medicine from AEVA in 2013
- ♦ Master's Degree in Small Animal Medicine and Master's Degree in Small Animal Clinical Ultrasound, from Improve International, where he learned from veterinarians of great impact and world reputation who were also members of the American College and/or European College of Veterinary Studies in 2016 and 2017
- ♦ In 2018 he obtained the Certificate of General Practitioner in Small Animal Medicine (GPCert SAM), awarded by the International School of Veterinary Postgraduate Studies (ISVPS)
- ♦ Received his GPCert in Ultrasound from the ISVPS in 2020
- ♦ Obtained the title of the XXXIII National and XXX International Endoscopy Course from the Jesús Usón Minimally Invasive Surgery Center, Cáceres
- ♦ Postgraduate course in Diagnostic Imaging, Improve International Postgraduate Diploma in Surgery and Anaesthesia of Small Animals from the Autonomous University of Barcelona (UAB)
- ♦ Postgraduate course in Small Animal Surgery offered by the Instituto Veterinario I-Vet

04

Structure and Content

The syllabus has been designed by the best professionals in the field of Small Animal Internal Medicine, who have extensive experience and recognized prestige in the profession, are backed by the volume of cases reviewed, studied, and diagnosed, and possess extensive knowledge of new technologies applied to veterinary medicine.





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We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Diagnostic Techniques in Internal medicine

- 1.1. Hematology
 - 1.1.1. Introduction to Hematology
 - 1.1.2. Red Series: Anemia and Polycythemia
 - 1.1.3. White Series: Anomalous Leucograms
 - 1.1.4. Platelets
- 1.2. Coagulation Alterations
 - 1.2.1. Thrombocytopenia and Thrombosis
 - 1.2.2. Thrombasthenia and Von Willebrand Disease
 - 1.2.3. Coagulation Rates
 - 1.2.4. Fibrinogen and Dimer-D
- 1.3. Biochemical Markers
 - 1.3.1. Hepatocellular Damage Markers
 - 1.3.2. Cholestasis Markers
 - 1.3.3. Renal Markers
 - 1.3.4. Digestive Pathology Markers
 - 1.3.5. Albumin and Plasma Protein
- 1.4. Electrolytic Assessment
 - 1.4.1. Potassium Alterations
 - 1.4.2. Sodium and Chlorine Alterations
 - 1.4.3. Phosphorus and Calcium Alterations
 - 1.4.4. Other Ions
- 1.5. Acid-Base Balance
 - 1.5.1. Introduction to Acid-Base Analysis
 - 1.5.2. Types of Acidosis
 - 1.5.3. Types of Alkalosis
 - 1.5.4. Hyperlactatemia
- 1.6. Analysis of Urine and Cavitary Fluids
 - 1.6.1. Obtaining Samples
 - 1.6.2. Urinalysis
 - 1.6.3. Urinary Sediment Assessment
 - 1.6.4. Cavitary Fluid Assessment and Categorization



- 1.7. Thoracic Radiology
 - 1.7.1. Principles of Thoracic Radiology
 - 1.7.2. Mediastinal Structures
 - 1.7.3. Lungs
 - 1.7.4. Heart
- 1.8. Abdominal X-Ray
 - 1.8.1. Principles of Abdominal Radiology
 - 1.8.2. Cranial Abdomen
 - 1.8.3. Mid-Abdomen
 - 1.8.4. Caudal Abdomen
- 1.9. Abdominal Ultrasound
 - 1.9.1. Principles of Abdominal Ultrasound
 - 1.9.2. Genitourinary Exploration
 - 1.9.3. Digestive Examination
 - 1.9.4. Hepatic, Splenic and Mesenteric Exploration
- 1.10. Non-Cardiac Thoracic Ultrasound and Other Applications
 - 1.10.1. Principles of Thoracic and Superficial Structure Ultrasound
 - 1.10.2. Thoracic Ultrasound Scan
 - 1.10.3. Cervical Ultrasonography
 - 1.10.4. Other Ultrasound Applications

“*This program allows you to combine your professional and work activities so that you can advance your career in a comfortable and practical way”*



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.





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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.

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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 Certificate in Diagnostic Techniques in Small Animal Internal Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Diagnostic Techniques in Small Animal Internal Medicine** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Diagnostic Techniques in Small Animal Internal Medicine**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
classroom



Postgraduate Certificate
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- » Modality: online
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