

Professional Master's Degree Small Animal Internal Medicine





Professional Master's Degree Small Animal Internal Medicine

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/veterinary-medicine/professional-master-degree/master-small-animal-internal-medicine

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01

Introduction

This intensive program in Small Animal Internal Medicine addresses all aspects related to the specific knowledge of the various areas of knowledge encompassed in this subject, as well as the development of assertive differential diagnostic protocols and appropriate diagnostic protocols that lead to an accurate and reliable definitive diagnosis, which, in turn, allows the establishment of appropriate therapy and control.





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This Professional Master's Degree is organized so that the deepening of knowledge is logical and intuitive and allows the consolidation of diagnostic, therapeutic and monitoring protocols"

In the veterinary profession, Internal Medicine is the fundamental pillar on which the practice of the profession is based, being closely linked to other specialties. In the last few decades, the knowledge about the pathophysiology of numerous processes and pathologies in animals has evolved notoriously, as well as the methodology, resources and diagnostic techniques. Great advances have also been made in the monitoring and therapy of these pathologies, which have led to a higher success rate both in the effective and early diagnosis of these processes and in the stabilization and control of these patients, which translates into a better quality of life and longevity.

The Professional Master's Degree in Small Animal Internal Medicine was created in response to the need of clinical veterinarians to expand the specific knowledge of Internal Medicine, as well as the approach of protocols and diagnostic techniques, therapeutics and relationship with other specialties.

The topics presented in this program have been selected with the aim of offering a complete, up-to-date and quality specialization in Internal Medicine, in such a way that the student acquires the appropriate knowledge to deal safely with the cases, as well as to be able to carry out an adequate follow-up, monitoring and therapy.

At present, one of the problems that conditions continuous postgraduate specialization is its reconciliation with work and personal life. Current professional demands make it difficult to provide quality, specialized, face-to-face education, so the online format will allow our students to reconcile this specialized training with their daily professional practice.

This **Professional Master's Degree in Small Animal Internal Medicine** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Small Animal Internal Medicine.
- ♦ The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional development.
- ♦ The latest developments in Small Animal Internal Medicine
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies in Small Animal Internal Medicine.
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- ♦ Content that is accessible from any fixed or portable device with an internet connection



Specialize with us and learn how to diagnose and treat diseases in small animals, in order to improve their quality of life"

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This 100% online Professional Master's Degree will allow you to balance your studies with your professional work while increasing your knowledge in this field"

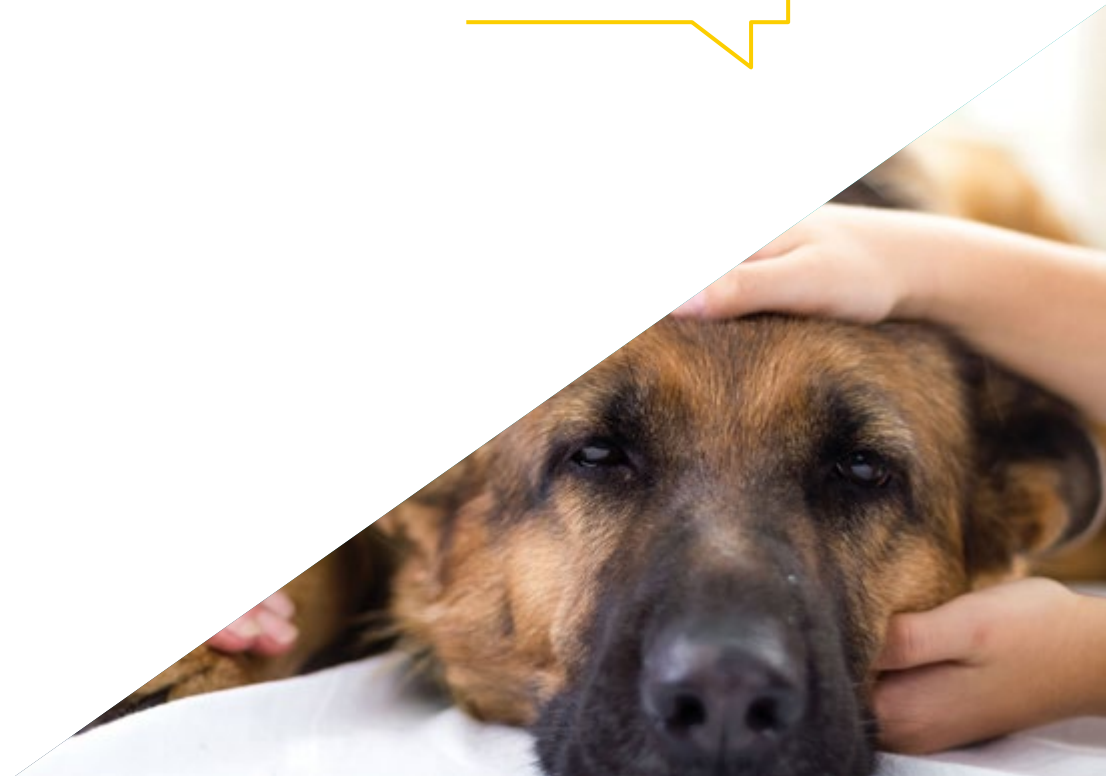
It includes, in its teaching staff, professionals belonging to the veterinary field, who bring to this program the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

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. To do so, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in the Professional Master's Degree in Small Animal Internal Medicine.

This program comes with the best teaching material, providing you with a contextual approach that will facilitate your learning.

You will learn how to elaborate a complete differential diagnosis to reach a definitive diagnosis of endocrinopathies.



02 Objectives

The Professional Master's Degree in Small Animal Internal Medicine is aimed at facilitating the performance of the veterinary professional with the latest advances and most innovative treatments in the sector.





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This is the best option to learn about the latest advances in Small Animal Internal Medicine"



General Objectives

- ♦ Understand the physiology of the cardiorespiratory system.
- ♦ Identify the clinical signs associated with cardiorespiratory diseases, as well as decision-making in the choice of the necessary diagnostic tests.
- ♦ Possess adequate knowledge and decision-making skills when dealing with pharmacological therapeutics applied to these organ systems
- ♦ Identify patients with non-specific abdominal pain and/or dehydration
- ♦ Compile all clinical signs related to diseases in the digestive tract
- ♦ Establish a list of differential diagnoses of animals with vomiting and diarrhea
- ♦ Generate specialized anatomical knowledge of the digestive system
- ♦ Be familiar with specific diagnostic laboratory and imaging tests used for the digestive tract
- ♦ Recognize pathologies associated with the urinary and reproductive systems
- ♦ Identify the most common clinical signs and the most likely organ(s) involved
- ♦ Learn to choose the right diagnostic approach
- ♦ Consolidate basic concepts related to neuroanatomy
- ♦ Be able to perform a complete neurological examination and localize a lesion, based on findings
- ♦ Elaborate a differential diagnosis according to history, anamnesis and neurological examination
- ♦ Establish a diagnostic protocol taking into account findings of neurological examination
- ♦ Gain in-depth understanding of the pathophysiology of endocrinopathies.
- ♦ Elaborate correct diagnostic protocol to address these problems
- ♦ Establish therapeutic bases for each group of pathologies according to the affected glandular function
- ♦ Develop an adequate control and follow-up plan
- ♦ Examine the life cycle and transmission of infectious diseases
- ♦ Present the most common infectious diseases and classify them
- ♦ Detect the most common infectious diseases in dogs and cats
- ♦ Develop an action protocol to diagnose and control the disease
- ♦ Establish a specific treatment for each of the infectious diseases
- ♦ Examine the basic anatomy and physiology of the eye
- ♦ Perform a complete ophthalmologic examination from the ocular appendages to the fundus of the eye
- ♦ Associate ophthalmologic signs and symptoms with systemic diseases
- ♦ Understand the evolution of various systemic diseases at the ophthalmologic level
- ♦ Be able to diagnose various systemic alterations by means of ophthalmologic examination
- ♦ Recognize most frequent neoplasms in pet animals
- ♦ Identify main cell lines at the cytological level
- ♦ Establish correct diagnostic protocol according to anamnesis and physical examination of animal
- ♦ Elaborate most appropriate treatment according to nature of tumor and physical condition of patient
- ♦ Analyze structure and physiology of skin and skin appendages
- ♦ Perform a correct and complete dermatological examination



- ◆ Differentiate types of dermatological lesions
- ◆ Carry out a correct diagnostic plan
- ◆ 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
- ◆ Substantiate importance of a comprehensive training process for animals collaborating in animal-assisted interventions (AAI)
- ◆ Establish parameters required to educate and train animals as co-therapists
- ◆ Assess efficiency of specialists carrying out training process for animals as co-therapists
- ◆ Establish basis for creation, administration and management of animal-assisted intervention (AAI)
- ◆ Establish conceptual basis for coordination of projects in the field of animal-assisted interventions (AAI)
- ◆ Generate tools to attract new customers and build customer loyalty
- ◆ Develop specialized knowledge to coordinate research projects in the area of animal-assisted interventions (AAI)
- ◆ Analyze, identify and effectively implement regulations that may apply to the field of assistance animals and animal-assisted therapies



Specific Objectives

Module 1. Cardiorespiratory Disorders

- ♦ Analyze and describe pathophysiological mechanisms of different diseases
- ♦ Identify the different diagnostic tests available for these two organ systems
- ♦ Adapt pharmacological therapy to specific condition of cardiorespiratory patient
- ♦ Identify clinical symptomatology of different cardiorespiratory diseases
- ♦ Accurately recognize different pulmonary radiographic patterns
- ♦ Interpret echocardiographic images
- ♦ Propose a methodology for the treatment of different cardiorespiratory pathologies
- ♦ Establish management procedure for patient with heart failure or acute dyspnea

Module 2. Abnormalities in the Digestive System

- ♦ Establish anamnesis and general physical examination of patients with vomiting and diarrhea
- ♦ Identify common alterations in blood tests, X-rays and abdominal ultrasounds
- ♦ Generate therapeutic plan for patients with vomiting
- ♦ Propose a therapeutic plan for patients with diarrhea and for icteric patients
- ♦ Examine hereditary and predisposed breed-associated diseases
- ♦ Demonstrate knowledge in management of dehydrated patients and/or those in septic condition
- ♦ Address commonly used drugs
- ♦ Identify the secondary pathophysiological consequences of digestive diseases on the rest of the organism
- ♦ Provide dietary recommendations

Module 3. Abnormalities in the Genitourinary System

- ♦ Select and interpret tests and results
- ♦ Draw up correct therapeutic guidelines
- ♦ Establish correct follow-up approach with chronic problems

Module 4. Neurology

- ♦ Determine whether lesion is intracranial or extracranial, based on neurological examination
- ♦ Examine main differences between central and peripheral SNs
- ♦ Establish a diagnostic protocol for seizure disorders
- ♦ Recognize a status epilepticus and know how to proceed with treatment
- ♦ Identify typical signs of upper and lower motor neuron syndrome
- ♦ Follow correct treatment guidelines for head injuries and establish prognosis
- ♦ Know basics of neuro-ophthalmology and know how to apply clinically

Module 5. Endocrine System Disorders

- ♦ Address the most common endocrinopathies
- ♦ Identify clinical signs of systemic pathologies
- ♦ Propose and perform different laboratory diagnostic techniques to diagnose these pathologies
- ♦ Elaborate a complete differential diagnosis to reach a definitive diagnosis of endocrinopathies
- ♦ Generate appropriate therapeutic, monitoring and follow-up plans according to pathology

Module 6. Infectious Diseases

- ◆ Determine biological cycle, propensity for transmission and incubation period of infectious diseases
- ◆ Analyze the most appropriate laboratory diagnostic techniques for each event
- ◆ Generate specialized knowledge to monitor and manage stable and critically ill patients
- ◆ Detect pathologies associated with these diseases

Module 7. Ophthalmology

- ◆ Address most common ophthalmologic alterations
- ◆ Diagnosis of several, more advanced ocular pathologies
- ◆ Establish treatments for different ophthalmologic pathologies
- ◆ Effective management of ophthalmologic emergencies
- ◆ Perform anesthesia for ophthalmological surgeries or on patients with ophthalmological pathologies

Module 8. Oncology

- ◆ Recognize the main oncological emergencies
- ◆ Identify main differences between mammary tumors in bitches and female cats
- ◆ Become familiar with the most common cytostatics and their management when administering chemotherapy
- ◆ Know how to manage an initial oncology consultation with owners
- ◆ Identify and know how to approach situations involving a paraneoplastic syndrome
- ◆ Assess different therapeutic options depending on type of neoplasm
- ◆ Propose diagnostic protocol that allows for adequate tumor staging
- ◆ Establish best therapeutic option(s) once the stage of the tumor is determined

Module 9. Dermatology

- ◆ Address the most common dermatological alterations
- ◆ Propose and perform different dermatological diagnostic techniques
- ◆ Elaborate a complete differential diagnosis to reach a definitive diagnosis of endocrinopathies
- ◆ Identify clinical, dermatological signs of systemic pathologies
- ◆ Generate an appropriate therapeutic plan according to dermatosis

Module 10. Diagnostic Techniques in Internal Medicine

- ◆ 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



Join one of the largest online universities in the world"

03 Skills

After passing the assessments of the Professional Master's Degree in Small Animal Internal Medicine, the professional will have acquired the necessary skills for a quality and up-to-date practice based on the most innovative educational methodology.





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This program will help you acquire the skills you need to excel in your daily work"

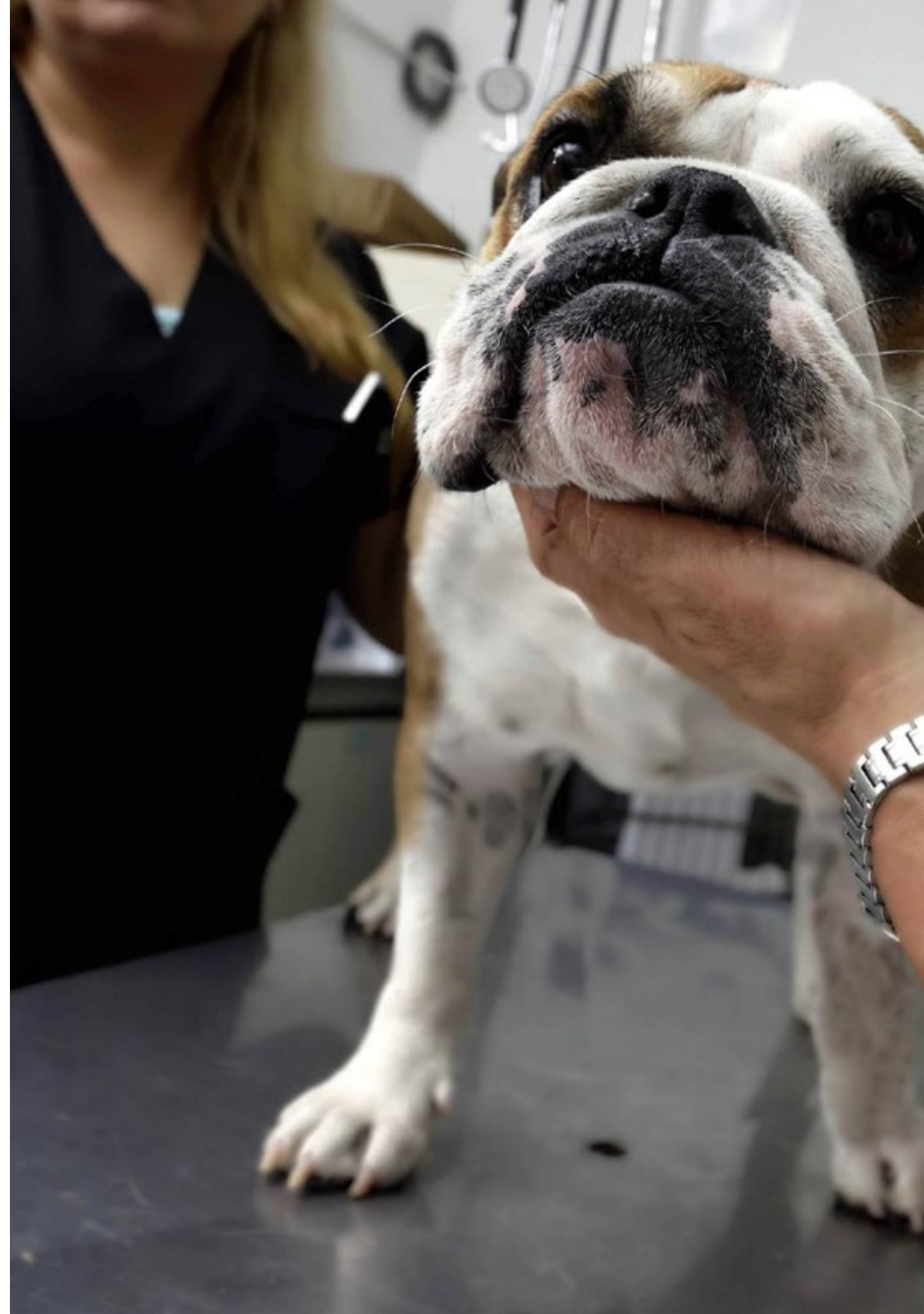


General Skills

- ♦ Identify and classify the most common infectious diseases
- ♦ Perform diagnostics to assess the patient's condition and appropriate medical treatment
- ♦ Understand the physiology of the cardiorespiratory system
- ♦ Understand the physiology of the endocrine system
- ♦ Understand the physiology of the digestive system
- ♦ Understand the physiology of the genitourinary system

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Take the step to get up to date with the Professional Master's Degree in Small Animal Internal Medicine"





Specific Skills

- ◆ Establish a list of differential diagnoses of animals with vomiting and diarrhea
- ◆ Identify main cell lines at the cytological level
- ◆ Examine the basic anatomy and physiology of the eye
- ◆ Elaborate a differential diagnosis according to history, anamnesis and neurological examination
- ◆ Perform diagnosis to address endocrinopathies
- ◆ Perform a correct and complete dermatological examination
- ◆ Identify parameters that make up a blood analysis
- ◆ Make correct choice of tests in different clinical situations

04

Course Management

The teaching staff of the program includes leading experts in Small Animal Internal Medicine who bring the experience of their work to this specialization. Professionals of recognized prestige have joined forces to offer you this high-level training.



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Our teaching team, experts in Small Animal Internal Medicine, will help you achieve success in your profession”

Management



Ms. Pérez-Aranda Redondo, María

- Head of the Dermatology Service of Symbiosis Veterinary Specialties Center. Veterinarian at Aljarafe Veterinary Center
- Head of the Dermatology and Diagnostic Cytology Service. From August 2017- October 2019
- Veterinary clinic of the veterinary center Canitas in East Sevilla. Responsible for the Dermatology and Cytological Diagnostic Service of all Canitas Veterinary Centers. April 2015- July 2017
- Stays at the Dermatology Department of the Hospital Clínic Veterinari of the Autonomous University of Barcelona.
- From 16 To 27 March 2015 Veterinarian at " Veterinary Center Villarrubia" November 2014 to 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 Surgery in Dermatology with Dr. D. Pedro Ginel Pérez. Student collaborator of the Department of Animal Medicine and Surgery in Dermatology with Professor Dr. D. Pedro Ginel Pérez during the 2010-2011, 2011-2012 and 2012-2013 academic years.
- Student intern at the Veterinary Clinic Hospital of the University of Cordoba during the 2011-2012 and 2012-2013 academic years.



Mr. Usabiaga Alfaro, Javier

- Degree in Veterinary Medicine from the University Alfonso X El Sabio (UAX), being a collaborating student at the University Veterinary Hospital UAX and rotating through all the services of the center (Internal Medicine, Surgery, Anesthesia, Diagnostic Imaging, Emergency and Hospitalization)
- Master's Degree in Small Animal Medicine and Emergency Medicine by AEVA in 2013
- Master's Degree of Small Animal Medicine and Master of Small Animal Clinical Ultrasound given by Improve International, learning from veterinarians of great impact and recognized prestige worldwide, members of the American College of Veterinary and/or the European College of Veterinary in 2016 and 2017
- Obtained in 2018 the title of General Practitioner Certificate in Small Animal Medicine (GPCert SAM) awarded by the International School of Veterinary Postgraduate Studies (ISVPS)
- Obtaining the GPCert in Ultrasound specialist certificate by the ISVPS in 2020
- Awarded the title of the XXXIII National and XXX International Endoscopy Course by the Jesús Usón Minimally Invasive Surgery Center of Cáceres
- Postgraduate course in Diagnostic Imaging given by Improve International. Postgraduate Diploma in Small Animal Surgery and Anesthesia and Anesthesia of Small Animals of the Autonomous University of Barcelona (UAB)
- Postgraduate course in Small Animal Surgery offered by the I-Vet Veterinary Institute

Professors

Dr. Cartagena Albertus, Juan Carlos

- ♦ Clinical Veterinarian in Small Animal and Exotic Veterinary Clinic
- ♦ Veterinary Expert
- ♦ Graduated in Veterinary Medicine in 1987 from the University of Zaragoza
- ♦ Doctor in Veterinary Oncology from the University of Las Palmas de Gran Canaria.
- ♦ Member of the Royal College of Veterinary Surgeons of London
- ♦ Accredited Specialist in Soft Tissue Surgery by AVEPA
- ♦ Accredited Specialist in Oncology by AVEPA

Dr. Moise, Antoaneta

- ♦ Veterinary Clinic in Veterinary Clinic for Small animals, horses and exotic animals
- ♦ Head of the Animal Health Department at the National Sanitary Directorate of Veterinary and Food Safety. Lalomita (Romania)
- ♦ Directorate of Private Farms and Forests. Slobozia (Romania)
- ♦ Veterinary surgeon. SC Lactilrom
- ♦ Bachelor/Graduate of the University of Bucharest
- ♦ Member of the Royal College of Veterinary Surgeons of London

Mr. Martín Santander, Víctor

- ♦ Head of the hospitalization service, ICU and emergency medicine of Symbiosis Veterinary Specialties Center. As well as an active member of the soft tissue surgery, anesthesia and analgesia and diagnostic imaging
- ♦ Degree in Biology with specialization in Zoology and Animal Biology from the Autonomous University of Barcelona in 2012
- ♦ Degree in Veterinary Medicine from the University of Zaragoza in 2017
- ♦ General Practitioner Certificate in Diagnostic Imaging at the ISVPS in 2020
- ♦ Master's Degree in Small Animal Clinic I and II at the Faculty of Veterinary Medicine at the University of Zaragoza. Currently studying: Postgraduate Diploma in small animal surgery, anesthesia and analgesia from the Autonomous University of Barcelona
- ♦ Co-direction of the Final Degree Project of the Faculty of Veterinary Medicine of the University of Zaragoza: Seroepidemiological study of feline leishmaniasis using two reference tests. July 2018 to September 2019
- ♦ Veterinarian member of the diagnostic imaging, internal medicine, hospitalization and emergency team at La Chopera Veterinary Hospital (Alcobendas, Madrid)-October 2019 to August 2020

Dr. Monge Utrilla, Óscar

- ♦ Head of cardiology service, veterinarian in charge of diagnostic imaging and anesthesia services, Simbiosis Veterinary Specialties, Getafe, Madrid (currently)
- ♦ Cardiology, Diagnostic Imaging and Endoscopy, KITICAN Group, Madrid (currently)
- ♦ Degree in Veterinary Medicine, Complutense University of Madrid 2017
- ♦ Degree Course "Specialist Course in Veterinary Hospital Clinic", University of León 2018
- ♦ Master's Degree "Veterinary Anesthesiology" by the TECH institute-University CEU-UCH, 2021
- ♦ In-house training in cardiology and respiratory medicine at Grupo Veterinario Kitican
- ♦ Creator of the "Cardio Podvet" podcast on veterinary cardiology. With more than 4000 reproductions, in 40 different countries (source: Anchor podcast), mainly in Europe and America
- ♦ Veterinarian in the emergency and cardiology service at the Majadahonda Veterinary Hospital (October 2018 - March 2019)
- ♦ Cardiology, ultrasound and outpatient endoscopy for Coromoto Diagnostic Imaging, Synergy (March 2019 - August 2020)

Dr. Morata Francisco, Sandra

- ♦ Veterinarian member of the ICU hospitalization service, emergency medicine and internal medicine at the Veterinary Hospital Madrid East
- ♦ Teaching presentation to the staff of the veterinary hospital Madrid East (veterinarian and veterinary technical assistant)
- ♦ Veterinary intern, member of the team of medical and surgical emergencies, anesthesiology, internal medicine, hospitalization-ICU and diagnostic imaging of the Veterinary Clinical Hospital of the University of Zaragoza
- ♦ Veterinarian member of the internal medicine and emergency service in CV Sada Zaragoza
- ♦ Degree in Veterinary Medicine from the University of Zaragoza
- ♦ Master's Degree in Small Animal Clinic I and II at the Faculty of Veterinary Medicine of the University of Zaragoza

Dr. Olmo López, José Antonio

- ♦ Internal Medicine and Diagnostic Imaging at Veterinary Assistance Santa Faz (Alicante)
- ♦ Different stays in reference hospitals in the Valencian Community.
- ♦ Degree in Veterinary Medicine from the University of Córdoba.
- ♦ Higher Postgraduate Course in Medium and Advanced Diagnostic Imaging by Cardenal Herrera University
- ♦ Author and co-author of several articles in national veterinary journals.

Dr. Pérez Palacios, Sergio

- ♦ Co-responsible for the Oncology and Cytology Service at Symbiosis Veterinary Specialties Center (2021-present)
- ♦ Active member of the Emergency, Hospitalization and Intensive Care Department at Symbiosis Veterinary Specialties Center (2021- Present)
- ♦ Degree in Veterinary Medicine from the University of Zaragoza in 2018
- ♦ Master's Degree in Small Animal Clinic I at the University of Zaragoza Veterinary Hospital of Zaragoza in 2019
- ♦ Master's Degree in Small Animal Clinic II at the Veterinary Hospital of the University of Zaragoza in 2020
- ♦ International Course on Oncology in the Canine and Feline Patient 2020
- ♦ Online Course on Oncology in the canine and feline patient 2020
- ♦ Online Course on Neurology in the canine and feline patient in 2020
- ♦ Poster with the title "Complete Remission and Prolonged Survival in a Case of canine atrial hemangiosarcoma" at the SEVC AVEPA 2020

Dr. Recio Monescillo, Julián

- ♦ Veterinarian at Simbiosis Specialty Center
- ♦ Ophthalmologic ambulatory specialty service. June 2019 – Present
- ♦ Collaborations in minimally invasive surgery with Ciruvet ambulatory service. 2018– Present
- ♦ Degree in Veterinary Medicine from Alfonso X El Sabio University of Madrid in 2014
- ♦ Member of the Spanish Society of Veterinary Ophthalmology (SEOVET)
- ♦ Master's Degree in Clinical Practice and Small Animal Emergencies of the Spanish Association of Applied Veterinary Medicine. AEVA. 2015
- ♦ Master's Degree in soft tissue surgery. UAB
- ♦ Basic surgery module
- ♦ Anesthesia Module
- ♦ Diploma in veterinary ophthalmology from the Complutense University of Madrid. 2018– 2019
- ♦ SEOVET online roundtable. SOS when the situation becomes complicated. May 2020
- ♦ Webseminar SEOVET online. Keys for the elaboration of a scientific article. June 2020
- ♦ Stays at Puchol Veterinary Hospital and Goya Veterinary Ophthalmology Center. (Madrid) December 2019. Ophthalmology Internship
- ♦ El Trébol Veterinary Clinic (Illescas) July 2020-September 2020

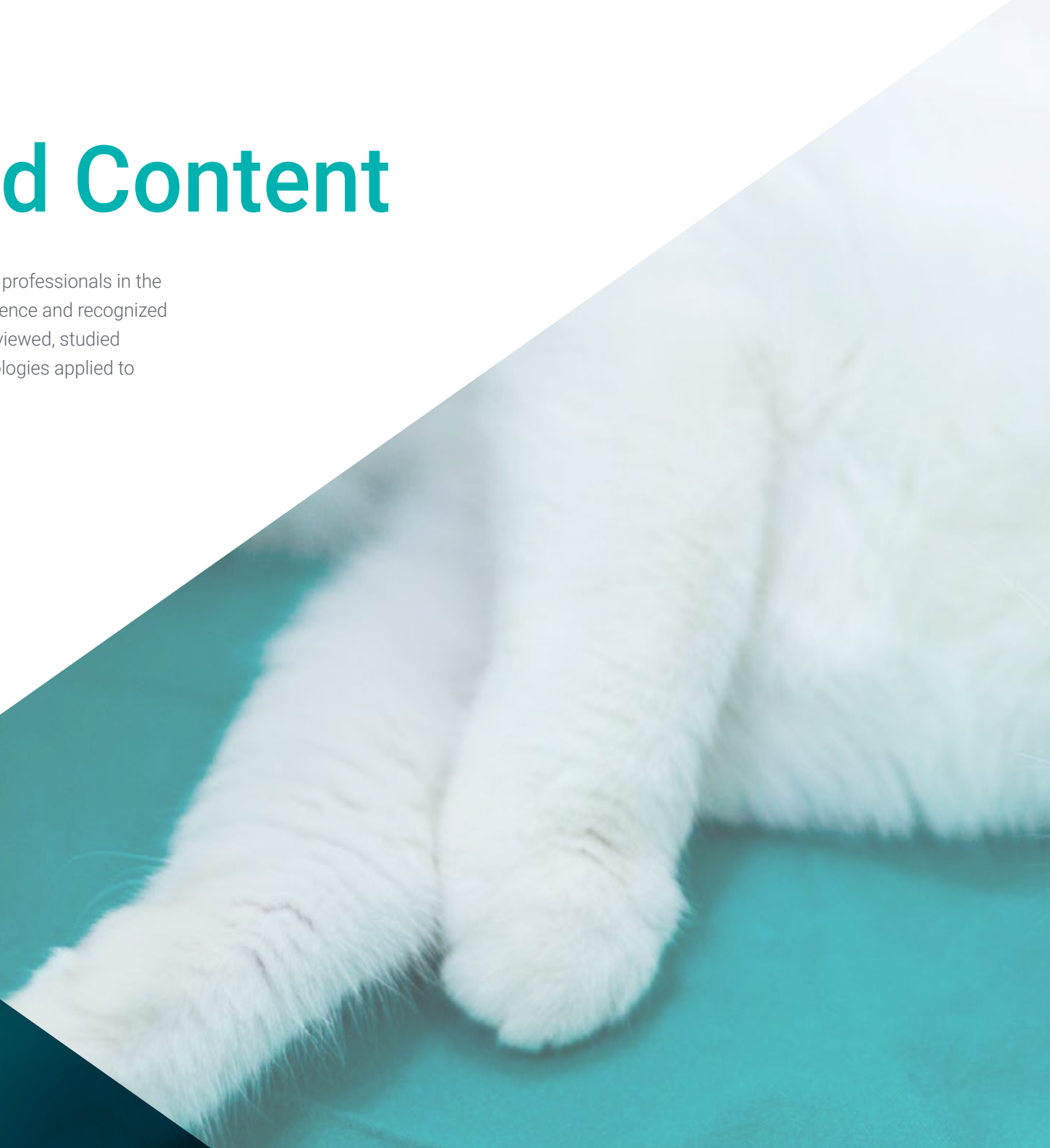
**Dr. Sánchez Gárriza, María**

- ◆ Founding partner and Director of the Simbiosis Veterinary Specialties Center, founding partner of the Association of Veterinary Specialists (ASESVET & HEALTH) and responsible for the Internal Medicine and Oncology Services
- ◆ Degree in Veterinary Medicine from the University of Zaragoza in 2014 and collaborator with the animal pathology service of large animals during her last years of her career
- ◆ Postgraduate degree in Small Animal Medicine taught by Improve International, obtaining the title of specialist General Practitioner Certificate in Small Animal Medicine (GPCert SAM) awarded by the ISVPS (International School of Veterinary Postgraduate Studies) in 2018
- ◆ Master's Degree in Veterinary Clinical Oncology taught by AEVA, own degree recognized by European University Miguel de Cervantes (UCME) in 2020
- ◆ Postgraduate course in Small Animal Medicine at the Autonomous University of Barcelona (UAB) EN 2020-2021
- ◆ Attending and finishing the course of Electrochemotherapy in Veterinary Medicine given by Vetoncology (Veterinary Oncology Service). The course is the only one in Latin America endorsed by the University of Buenos Aires (UBA) in Argentina and the International Society for Electroporation-Based Technologies and Treatments (ISEBTT)
It is organized and directed by Drs. Guillermo Marshall, Matías Tellado and Felipe Maglietti
- ◆ Stays with leading professionals in Veterinary Oncology in Spain for a few weeks in 2020
- ◆ Responsible for internal medicine and diagnostic imaging services in several centers in Pamplona during the years 2014-2017

05

Structure and Content

The structure of the contents has been designed by the best professionals in the field of Small Animal Internal Medicine, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with 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. Cardiorespiratory Disorders

- 1.1. Cardiorespiratory Physiology
 - 1.1.1. Cardiovascular System Physiology
 - 1.1.2. Physiology of the Respiratory System
 - 1.1.3. Pathophysiology of Cardiac Failure
- 1.2. Cardiorespiratory System Examination
 - 1.2.1. Anamnesis and Physical Examination
 - 1.2.2. Femoral Pulse Palpation
 - 1.2.3. Respiratory Pattern
 - 1.2.4. Cardiac Auscultation
 - 1.2.5. Pulmonary Auscultation
- 1.3. Thoracic Radiography
 - 1.3.1. Basics of Thoracic Radiology
 - 1.3.2. Interstitial Pattern
 - 1.3.3. Alveolar Pattern
 - 1.3.4. Bronchial Pattern
 - 1.3.5. Vascular and Mixed Pattern
 - 1.3.6. Cardiac Silhouette Assessment
 - 1.3.7. VHS, VLAS and other Cardiac Measurements in Thoracic Radiography
- 1.4. Electrocardiography
 - 1.4.1. Guidelines for Electrocardiographic Interpretation
 - 1.4.2. Tachyarrhythmias
 - 1.4.3. Bradyarrhythmias and Conduction Disturbances
- 1.5. Echocardiography
 - 1.5.1. Fundamentals of Echocardiography
 - 1.5.2. Echocardiographic Anatomy (B-mode and M-mode)
 - 1.5.3. Pulsed, Continuous, Color, and Tissue Doppler
- 1.6. Diagnostic Tests of the Respiratory System
 - 1.6.1. Rhinoscopy and Pharyngoscopy
 - 1.6.2. Bronchoscopy
 - 1.6.3. Pulmonary CT
- 1.7. Cardiovascular Diseases I
 - 1.7.1. Chronic Degenerative Mitral and Tricuspid Valve Disease
 - 1.7.2. Canine and Feline Dilated Cardiomyopathy
 - 1.7.3. Canine and Feline Hypertrophic Cardiomyopathy
 - 1.7.4. Restrictive Cardiomyopathy
 - 1.7.5. Arrhythmogenic Right Ventricular Cardiomyopathy
- 1.8. Cardiovascular Diseases II
 - 1.8.1. Pulmonary Stenosis.
 - 1.8.2. Subaortic Stenosis
 - 1.8.3. Patent Ductus Arteriosus
 - 1.8.4. Valvular Dysplasia
 - 1.8.5. Tetralogy of Fallot
 - 1.8.6. Systemic and Pulmonary Hypertension
 - 1.8.7. Management of Congestive Heart Failure
- 1.9. Respiratory Diseases I
 - 1.9.1. Rhinitis and Brachiocephalic Syndrome
 - 1.9.2. Tracheal Stenosis
 - 1.9.3. Chronic Bronchitis and Feline Asthma
 - 1.9.4. Pneumonias
 - 1.9.5. Pulmonary Fibrosis
 - 1.9.6. Pulmonary Neoplasms
- 1.10. Respiratory Diseases II
 - 1.10.1. Diseases of the Pleura and Pleural Space
 - 1.10.2. Dirofilariasis and Pulmonary Thromboembolism
 - 1.10.3. Management Dyspneic Patients

Module 2. Abnormalities in the Digestive System

- 2.1. Approach to Patients with Vomiting
 - 2.1.1. Pathophysiology of Vomiting
 - 2.1.2. Etiology
 - 2.1.3. Clinical Symptoms
 - 2.1.4. Alterations in Blood Count and Serum Biochemistry
 - 2.1.5. Diagnostic Protocol
 - 2.1.6. Treatment for Vomiting
 - 2.1.6.1. Commercial Diets
 - 2.1.6.2. Antiemetics
 - 2.1.6.3. Gastric Acid Suppressants and Antacids
 - 2.1.6.4. Stomach Mucosal Protectors
- 2.2. Approach to Patients with Diarrhea
 - 2.2.1. Pathophysiology of Diarrhea
 - 2.2.2. Classification and Etiology
 - 2.2.3. Clinical Symptoms
 - 2.2.4. Differential Diagnosis
 - 2.2.4.1. Acute Diarrhea
 - 2.2.4.2. Chronic Diarrhea
- 2.3. Common Pathologies of the Oral Cavity and Esophagus
 - 2.3.1. Dysphagia
 - 2.3.2. Cricopharyngeal Dysfunction
 - 2.3.2.1. Cricopharyngeal Achalasia
 - 2.3.2.2. Asynchronous Cricopharyngeal
 - 2.3.3. Regurgitation
 - 2.3.4. Esophageal Pathologies
 - 2.3.4.1. Megaesophagus
 - 2.3.4.2. Oesophagitis
 - 2.3.4.3. Oesophageal Stricture
 - 2.3.4.4. Vascular Anomaly
 - 2.3.4.5. Hiatal Hernia
- 2.4. Gastric Disorders
 - 2.4.1. Acute Gastritis
 - 2.4.2. Chronic Gastritis
 - 2.4.3. Gastric Ulcers
 - 2.4.4. Foreign Body Obstruction
 - 2.4.5. Neoplasty
- 2.5. Small Intestine Diseases
 - 2.5.1. Acute Enteritis
 - 2.5.2. Chronic Intestinal Disease
 - 2.5.3. Protein-Losing Enteropathy
 - 2.5.4. Intestinal Bacterial Overgrowth
 - 2.5.5. Neoplasms
- 2.6. Large Intestinal Diseases
 - 2.6.1. Chronic Diarrhea
 - 2.6.2. Infection by *Tritrichomonas Foetus*
 - 2.6.3. Constipation in Cats
 - 2.6.4. Ulcerative Histiocytic Colitis
 - 2.6.5. Neoplasms
- 2.7. Principles of Ultrasound and Gastrointestinal Endoscopy
 - 2.7.1. Two-Dimensional Description of Normal Digestive Structures
 - 2.7.2. Gastroduodenoscopy
 - 2.7.2.1. Patient Preparation
 - 2.7.2.2. Preparation of Material
 - 2.7.2.3. Procedure
 - 2.7.3. Colonoscopy
 - 2.7.3.1. Patient Preparation
 - 2.7.3.2. Procedure
- 2.8. Hepatobiliary Diseases I. Hepatopathies in Dogs
 - 2.8.1. Differences in Cats and Dogs
 - 2.8.2. Diagnosis
 - 2.8.3. Supportive therapy

- 2.8.4. Hepatopathies in Dogs
 - 2.8.4.1. Chronic Hepatitis
 - 2.8.4.2. Leptospirosis.
 - 2.8.4.3. Drug-Associated Hepatopathy or Liver Disease
 - 2.8.4.4. Portal Vein Hypoplasia
 - 2.8.4.5. Portosystemic Shunt
 - 2.8.4.5.1. Congenital SPS
 - 2.8.4.5.2. Acquired SPS
- 2.9. Hepatobiliary Diseases II
 - 2.9.1. Hepatopathies in Cats
 - 2.9.1.1. Hepatic Lipidosis
 - 2.9.1.2. Acute Hepatitis
 - 2.9.1.3. Chronic Hepatitis
 - 2.9.1.4. Feline Infectious Peritonitis
 - 2.9.1.5. Hepatic Amyloidosis
 - 2.9.1.6. Drug-Associated Hepatopathy or Liver Disease
 - 2.9.2. Hepatic Neoplasia
 - 2.9.3. Biliary Diseases
 - 2.9.3.1. Biliary Mucocele
 - 2.9.3.2. Neutrophilic Cholangitis
 - 2.9.3.3. Lymphocytic Cholangitis
 - 2.9.3.4. Chronic Cholangitis Associated with Trematodes
 - 2.9.4. Neoplasms of the Gallbladder and Bile Ducts
- 2.10. Diseases of the Exocrine Pancreas
 - 2.10.1. Pathophysiology
 - 2.10.2. Diagnosis
 - 2.10.3. Acute Pancreatitis
 - 2.10.4. Necrotizing Pancreatitis
 - 2.10.5. Exocrine Pancreatic Insufficiency
 - 2.10.6. Neoplasms



Module 3. Abnormalities in the Genitourinary System

- 3.1. Urinary Physiology and Clinical Manifestations
 - 3.1.1. Physiology of the Kidney
 - 3.1.2. Polyuria
 - 3.1.3. Stranguria and Dysuria
 - 3.1.4. Incontinence and Urinary Retention
 - 3.1.5. Systemic Hypertension
- 3.2. Functional Urinary Disorders
 - 3.2.1. Urinalysis
 - 3.2.2. Creatinine and Urea
 - 3.2.3. SDMA
 - 3.2.4. UPC
 - 3.2.5. Urinary Sediments
- 3.3. Disorders of Upper Tract
 - 3.3.1. Glomerulonephritis
 - 3.3.2. Tubular Disorders
 - 3.3.3. Congenital Kidney Diseases
 - 3.3.4. Ureteral Disorders
- 3.4. Disorders of Lower Tract
 - 3.4.1. Cystitis
 - 3.4.2. Urolithiasis
 - 3.4.3. Prostate and Urethral Disorders
- 3.5. Chronic Kidney Disease
 - 3.5.1. Diagnostic Approximation
 - 3.5.2. Treatment
 - 3.5.3. Monitoring and Follow-Up
- 3.6. Acute Kidney Failure
 - 3.6.1. Diagnostic Approximation
 - 3.6.2. Oliguric, Anuric or Polyuric? How to Differentiate Between the 3
 - 3.6.3. Treatment, Monitoring and Follow-Up

- 3.7. Physiology and Clinical Manifestations of Reproductive System
 - 3.7.1. Physiology of Genital Apparatus
 - 3.7.2. Clinical Signs Associated with Reproductive System
- 3.8. Male Genital Apparatus
 - 3.8.1. Genital Examination
 - 3.8.2. Differential of Male Reproductive Diseases
 - 3.8.3. Therapeutic Options and Guidelines
- 3.9. Females Genital Apparatus
 - 3.9.1. Genital Examination
 - 3.9.2. Differential of Female Reproductive Diseases
 - 3.9.3. Follow-Up of Gestation
 - 3.9.4. Therapeutic Options and Guidelines
- 3.10. Genitourinary Emergencies
 - 3.10.1. Urinary Obstruction.
 - 3.10.2. Uroabdomen
 - 3.10.3. Pyometra
 - 3.10.4. Prolapse and Paraphimosis

Module 4. Neurology

- 4.1. Neuroanatomy
 - 4.1.1. CNS
 - 4.1.2. PNS
- 4.2. Neurological Examination I
 - 4.2.1. State of Mind
 - 4.2.2. Posture and Gait
 - 4.2.3. Cranial Nerves
 - 4.2.4. Postural Reactions
 - 4.2.5. Spinal Reflexes
- 4.3. Neurological Examination II
 - 4.3.1. Lower and Upper Motor Neurons
 - 4.3.2. Paresis and Ataxia
 - 4.3.3. Reflex vs. Reaction
 - 4.3.4. Neuro-Ophthalmology I
 - 4.3.5. Neuro-Ophthalmology II

- 4.4. Location of the Lesion (Neurolocalization)
 - 4.4.1. Where is the Lesion?
 - 4.4.2. Intracranial vs. Extracranial
 - 4.4.3. Intracranial: Anterior Encephalon, Brainstem, Vestibular System and Cerebellum
 - 4.4.4. Extracranial: Spinal Cord, PNS and Muscle
- 4.5. Differential Diagnosis (Vitamin D)
 - 4.5.1. Vascular
 - 4.5.2. Inflammatory/Infectious
 - 4.5.3. Traumatological/Toxic
 - 4.5.4. Congenital Abnormalities
 - 4.5.5. Metabolic
 - 4.5.6. Idiopathic
 - 4.5.7. Neoplastic
 - 4.5.8. Degenerative
- 4.6. Diagnostic Techniques
 - 4.6.1. Blood and Urine Tests
 - 4.6.2. Serum Titrations
 - 4.6.3. LCR
 - 4.6.4. Imaging Tests: CXR, CT and MR
 - 4.6.5. Electrodiagnostic Tests
- 4.7. Epilepsy and Seizures
 - 4.7.1. Introduction and Pathophysiology
 - 4.7.2. Clinical Signs and Classification
 - 4.7.3. Diagnostic Protocol
 - 4.7.4. Crisis Treatment
 - 4.7.5. Status Epilepticus
- 4.8. Cranioencephalic Trauma
 - 4.8.1. Pathophysiology
 - 4.8.2. Clinical Symptoms
 - 4.8.3. Diagnostic Protocol
 - 4.8.4. Treatment
 - 4.8.5. Prognosis

- 4.9. Neuromuscular Debility
 - 4.9.1. Botulism
 - 4.9.2. Myasthenia Gravis
 - 4.9.3. Polyradiculoneuritis
- 4.10. Vestibular Syndrome
 - 4.10.1. Anatomy
 - 4.10.2. Clinical Signs (Central vs. Peripheral)
 - 4.10.3. Vestibular System Pathologies
 - 4.10.4. Diagnosis
 - 4.10.5. Treatment

Module 5. Endocrine System Disorders

- 5.1. Approach to the Endocrine Patient
 - 5.1.1. Obesity
 - 5.1.2. Polyuria/Polydipsia
 - 5.1.3. Alopecia
 - 5.1.4. Weaknesses
 - 5.1.5. Hyperlipemia
- 5.2. Pituitary Disorders
 - 5.2.1. Pituitary Dwarfism
 - 5.2.2. Acromegaly
 - 5.2.3. Diabetes Insipidus
- 5.3. Thyroid Disorders
 - 5.3.1. Canine Hypothyroidism
 - 5.3.2. Feline Hypothyroidism
 - 5.3.3. Canine Hyperthyroidism
 - 5.3.4. Feline Hyperthyroidism
- 5.4. Parathyroid Disorders
 - 5.4.1. Canine Hypoparathyroidism and Hypocalcemia
 - 5.4.2. Feline Hypoparathyroidism and Hypocalcemia
 - 5.4.3. Canine Hyperparathyroidism and Hypercalcemia
 - 5.4.4. Feline Hyperparathyroidism and Hypercalcemia

- 5.5. Pancreatic Disorders
 - 5.5.1. Canine Diabetes Mellitus
 - 5.5.2. Feline Diabetes Mellitus
 - 5.5.3. Insulinoma
 - 5.5.4. Glucagonoma
- 5.6. Adrenal Gland Disorders
 - 5.6.1. Hyperadrenocorticism
 - 5.6.2. Hypoadrenocorticism
 - 5.6.3. Hyperaldosteronism
 - 5.6.4. Pheochromocytoma
- 5.7. Sex Hormone Disorders
 - 5.7.1. Hyperestrogenism in Females
 - 5.7.2. Hyperestrogenism in Males
 - 5.7.3. Other Sex Hormone Disorders
- 5.8. Diagnostic Approach to Endocrinopathies
 - 5.8.1. Laboratory Tests
 - 5.8.2. Diagnostic Imaging Techniques
 - 5.8.3. Other Tests
- 5.9. Monitoring and Follow-Up of Endocrinopathies
 - 5.9.1. Diabetic Patient Monitoring
 - 5.9.2. Hypothyroid Patient Monitoring
 - 5.9.3. Hyperthyroid Patient Monitoring
 - 5.9.4. Monitoring of Patients with Hyperadrenocorticism
 - 5.9.5. Monitoring of Patients with Hypoadrenocorticism
 - 5.9.6. Caring for Patients with Parathyroid Alterations
- 5.10. Emergencies
 - 5.10.1. Diabetic ketoacidosis
 - 5.10.2. Addisonian Crisis
 - 5.10.3. Thyroid Storm

Module 6. Infectious Diseases

- 6.1. Digestive and Respiratory Parasitic Diseases I
 - 6.1.1. Protozoa
 - 6.1.1.1. Giardiasis
 - 6.1.1.2. Trichomonads
 - 6.1.1.3. Coccidia
 - 6.1.1.4. Toxoplasma
- 6.2. Digestive and Respiratory Parasitic Diseases II
 - 6.2.1. Nematodes
 - 6.2.2. Cestodes
- 6.3. Leishmania
 - 6.3.1. Cycle
 - 6.3.2. Diagnosis
 - 6.3.3. Treatment
- 6.4. Filaria
 - 6.4.1. Cycle
 - 6.4.2. Diagnosis
 - 6.4.3. Treatment
- 6.5. Parasitic Diseases Transmitted by Ticks
 - 6.5.1. Ehrlichia and Anaplasma
 - 6.5.2. Babesia
 - 6.5.3. Borrelia
 - 6.5.4. Rickettsia
- 6.6. Viral Diseases in Canines
 - 6.6.1. Parvovirus
 - 6.6.2. Coronavirus
 - 6.6.3. Distemper
- 6.7. Canine and Feline Bacterial Diseases
 - 6.7.1. Leptospira
 - 6.7.2. Helicobacter and Other Digestive Bacteria
 - 6.7.3. Chlamydia
 - 6.7.4. Mycoplasmas
 - 6.7.5. Bordetella

- 6.8. Viral Diseases in Felines I
 - 6.8.1. Leukemia
 - 6.8.2. Immunodeficiencies
- 6.9. Viral Diseases in Felines II
 - 6.9.1. Panleukopenia
 - 6.9.2. Feline Infectious Peritonitis
 - 6.9.3. Calicivirus
 - 6.9.4. Herpesvirus
- 6.10. External Parasitic Diseases and Emerging Infectious Diseases
 - 6.10.1. External Parasites and Dermatophytes
 - 6.10.1.1. Scabies
 - 6.10.1.2. Fleas
 - 6.10.1.3. Fungal
 - 6.10.2. Fleas

Module 7. Ophthalmology

- 7.1. Anatomy, Physiology and Ophthalmologic Examination
 - 7.1.1. Basic Ocular Anatomy
 - 7.1.2. Physiology of Vision
 - 7.1.3. Ophthalmologic Examination
- 7.2. Associated Ocular Diseases
 - 7.2.1. Orbit
 - 7.2.2. Eyelids
 - 7.2.3. Conjunctivitis
 - 7.2.4. Nictitating Membrane
 - 7.2.5. Lacrimal System
- 7.3. Keratitis
 - 7.3.1. Ulcerative Keratitis
 - 7.3.1.1. Superficial Ulceration
 - 7.3.1.2. Deep Ulceration
 - 7.3.1.3. Descemet Ulcer
 - 7.3.1.4. Corneal Perforation
 - 7.3.1.5. Indolent Ulcer
 - 7.3.1.6. Medical Treatment
 - 7.3.1.7. Surgical Resolution

- 7.3.2. Non-Ulcerative Keratitis
 - 7.3.2.1. Superficial Keratitis
 - 7.3.2.2. Pigmentary Keratitis
 - 7.3.2.3. Keratoconjunctivitis Sicca
 - 7.3.2.4. Feline Eosinophilic Keratitis
- 7.4. Uveitis I
 - 7.4.1. Pathophysiology of Uveitis
 - 7.4.2. Causes of Uveitis in the Canine Species
 - 7.4.3. Causes of Uveitis in the Feline Species
- 7.5. Uveitis II
 - 7.5.1. Diagnostic Protocol for Uveitis
 - 7.5.2. Other Systemic Disorders Associated with Uveitis
 - 7.5.3. Treatment for Uveitis
- 7.6. Diseases of the Crystalline Lens
 - 7.6.1. Anterior Lens Luxation
 - 7.6.2. Posterior Lens Luxation
 - 7.6.3. Cataracts
- 7.7. Glaucoma
 - 7.7.1. Introduction
 - 7.7.2. Classification of Glaucoma
 - 7.7.3. Treatment for Glaucoma
- 7.8. Posterior Segment
 - 7.8.1. Vitreous
 - 7.8.2. Retina
 - 7.8.3. Optic Nerve
- 7.9. Emergencies
 - 7.9.1. Classification
 - 7.9.2. Diagnosis
 - 7.9.3. Treatment
- 7.10. Therapeutics, Anesthesia and Ocular Ultrasonography
 - 7.10.1. Treatment
 - 7.10.2. Anesthesia
 - 7.10.3. Ultrasound

Module 8. Oncology

- 8.1. Approach to Patients with Cancer
 - 8.1.1. Oncology Patient and Owner
 - 8.1.2. Paraneoplastic Syndromes
 - 8.1.3. Types of Treatment Response
- 8.2. Diagnosis and Staging of Cancer Patients
 - 8.2.1. Diagnostic Methods
 - 8.2.2. Clinical Staging
- 8.3. Diagnostic Cytology and Biopsy Collection
 - 8.3.1. Obtaining and Handling Cytological Sample
 - 8.3.2. Cytological Interpretation
 - 8.3.3. Cytology of Inflammatory and Hyperplastic Lesions
 - 8.3.4. Cytology of Neoplasms and Criteria for Malignancy
 - 8.3.5. Tumors of Epithelial Origin
 - 8.3.6. Tumors of Conjunctival Origin
 - 8.3.7. Round Cell Tumours
 - 8.3.8. Biopsy Techniques
- 8.4. Principles of Anti-Tumor Therapy
 - 8.4.1. Surgery
 - 8.4.2. Indications and Uses of the Chemotherapy
 - 8.4.3. Main Chemotherapeutic Drugs
 - 8.4.4. Dosage, Administration Rates and Development of Resistance
 - 8.4.5. Toxicity for the Patient
 - 8.4.6. Management of Cytotoxic Agents
 - 8.4.7. Metronomic Chemotherapy
 - 8.4.8. Electrochemotherapy
 - 8.4.9. Other Treatment Options I: Radiotherapy
 - 8.4.10. Other Treatment Options II: Immunotherapy
- 8.5. Soft Tissue Sarcomas: Hemangiosarcoma, VAS
 - 8.5.1. Major Clinical and Pathological Aspects of Hemangiosarcoma
 - 8.5.2. Diagnosis and Treatment Guidelines for Hemangiosarcoma
 - 8.5.3. Feline Hemangiosarcoma
 - 8.5.4. Major Clinical and Pathological Aspects of VAS
 - 8.5.5. Diagnosis and Treatment Guidelines for VAS
- 8.6. Skin Neoplasms: Mastocytoma
 - 8.6.1. Major Clinical and Pathological Aspects of Mastocytoma
 - 8.6.2. Histological Grades
 - 8.6.3. Keys to Mastocytoma Diagnosis and Treatment
 - 8.6.4. Feline Mastocytoma
- 8.7. Breast Neoplasia
 - 8.7.1. Major Clinical and Pathological Aspects in Bitches
 - 8.7.2. Major Clinical and Pathological Aspects in Female Cats
 - 8.7.3. Diagnostic Protocol and Clinical Staging in Bitches
 - 8.7.4. Diagnostic Protocol and Clinical Staging in Female Cats
 - 8.7.5. Treatment Guidelines for Bitches
 - 8.7.6. Treatment Guidelines for Female Cats
 - 8.7.7. Inflammatory Carcinoma
- 8.8. Hemolymphoid Neoplasms: Leukemia and Lymphoma
 - 8.8.1. Major Clinical and Pathological Aspects of Canine Lymphoma
 - 8.8.2. Diagnosis and Treatment Guidelines for Canine Lymphoma
 - 8.8.3. Major Clinical and Pathological Aspects of Feline Lymphoma
 - 8.8.4. Diagnosis and Treatment Guidelines for Feline Lymphoma
 - 8.8.5. Acute Leukemia: Diagnosis and Treatment
 - 8.8.6. Chronic Leukemia: Diagnosis and Treatment
- 8.9. Other Major Neoplasms in Dogs and Cats
 - 8.9.1. Osteosarcoma
 - 8.9.2. Squamous Cell Carcinoma (SCC)
 - 8.9.3. Melanoma
 - 8.9.4. Gastrointestinal Tumors
- 8.10. Oncologic Emergencies
 - 8.10.1. Hypercalcemia
 - 8.10.2. Hypoglycemia
 - 8.10.3. Febrile Neutropenia
 - 8.10.4. Tumor Lysis Syndrome
 - 8.10.5. Hyperviscosity Syndrome

Module 9. Dermatology

- 9.1. Structure and Physiology of the Skin
 - 9.1.1. Functions of the Skin
 - 9.1.2. Skin Anatomy
 - 9.1.3. Skin Appendages
- 9.2. Dermatologic Lesions
 - 9.2.1. Primary Skin Lesions
 - 9.2.2. Secondary Skin Lesions
 - 9.2.3. Primary and Secondary Lesions
- 9.3. Diagnostic Testing Based on Type of Lesion
 - 9.3.1. Immediate Interpretation Tests
 - 9.3.2. Late Onset Interpretation Tests
 - 9.3.3. Complementary Tests in Dermatoses with Systemic Involvement
- 9.4. Lesion Patterns and Differential Diagnosis
 - 9.4.1. Erythematous Pattern
 - 9.4.2. Purpuric Pattern
 - 9.4.3. Macular Pattern
 - 9.4.4. Vesicular Pattern
 - 9.4.5. Pustular Pattern
 - 9.4.6. Papular Pattern
 - 9.4.7. Nodular Pattern
 - 9.4.8. Erosive-Ulcerative Pattern
 - 9.4.9. Alopecic Pattern
 - 9.4.10. Flaking Pattern
 - 9.4.11. Scab Pattern
- 9.5. Cutaneous Hypersensitivity
 - 9.5.1. Canine Atopic Dermatitis
 - 9.5.2. Feline Atopic Dermatitis
 - 9.5.3. Contact Dermatitis
- 9.6. Otitis Externa
 - 9.6.1. Pathophysiology of the Otitis Process
 - 9.6.2. Factors Affecting the Otitis Process
 - 9.6.3. Diagnostic Protocol
 - 9.6.4. Therapeutic Approach
- 9.7. Pododermatitis
 - 9.7.1. Pododermatitis in Canine Patients
 - 9.7.2. Pododermatitis in Feline Patients
 - 9.7.3. Therapeutic Approach to Pododermatitis
- 9.8. Skin Infections Caused by Multi-Resistant Microorganisms
 - 9.8.1. Mechanisms for the Development of Multiresistance
 - 9.8.2. Diagnostic Approach to Multi-Resistant Infections
 - 9.8.3. Therapeutic Approach to Multi-Resistant Infections
- 9.9. Immune-Mediated Dermatoses
 - 9.9.1. Immune-Mediated Dermatoses in Canine Patients
 - 9.9.2. Immune-Mediated Dermatoses in Feline Patients
 - 9.9.3. Diagnostic Protocol
 - 9.9.4. Therapeutic Approach to Immune-Mediated Dermatoses
- 9.10. Nutritional Dermatoses and Hereditary or Congenital Dermatoses
 - 9.10.1. Nutritional Dermatoses
 - 9.10.2. Hereditary or Congenital Dermatoses
 - 9.10.3. Diagnostic Protocol
 - 9.10.4. Therapeutic Approach

Module 10. Diagnostic Techniques in Internal Medicine

- 10.1. Hematology
 - 10.1.1. Introduction to the Hematology
 - 10.1.2. Red Series: Anemia and Polycythemia
 - 10.1.3. White Series: Anomalous Leucograms
 - 10.1.4. Platelets
- 10.2. Coagulation Alterations
 - 10.2.1. Thrombocytopenia and Thrombosis
 - 10.2.2. Thrombasthenia and Von Willebrand's Disease
 - 10.2.3. Coagulation Rates
 - 10.2.4. Fibrinogen and Dimer-D
- 10.3. Biochemical Markers
 - 10.3.1. Hepatocellular Damage Markers
 - 10.3.2. Cholestasis Markers
 - 10.3.3. Renal Markers
 - 10.3.4. Digestive Pathology Markers
 - 10.3.5. Albumin and Plasma Protein
- 10.4. Electrolytic Assessment
 - 10.4.1. Potassium Alterations
 - 10.4.2. Sodium and Chlorine Alterations
 - 10.4.3. Phosphorus and Calcium Alterations
 - 10.4.4. Other Ions
- 10.5. Acid-Base Balance
 - 10.5.1. Introduction to Acid-Base Analysis
 - 10.5.2. Types of Acidosis
 - 10.5.3. Types of Alkalosis
 - 10.5.4. Hyperlactatemia
- 10.6. Analysis of Urine and Cavitory Fluids
 - 10.6.1. Obtaining Samples
 - 10.6.2. Urinalysis
 - 10.6.3. Urinary Sediment Assessment
 - 10.6.4. Cavitory Fluid Assessment and Categorization
- 10.7. Thoracic Radiology
 - 10.7.1. Principles of Thoracic Radiology
 - 10.7.2. Mediastinal Structures
 - 10.7.3. Lungs
 - 10.7.4. Heart
- 10.8. Abdominal X-Ray
 - 10.8.1. Principles of Abdomen Radiology
 - 10.8.2. Cranial Abdomen
 - 10.8.3. Mid-Abdomen
 - 10.8.4. Caudal Abdomen
- 10.9. Abdominal ultrasound
 - 10.9.1. Principles of Abdomen Ultrasound
 - 10.9.2. Genitourinary Examination
 - 10.9.3. Digestive Examination
 - 10.9.4. Hepatic, Splenic and Mesenteric Examination
- 10.10. Non-Cardiac Thoracic Ultrasound and Other Applications
 - 10.10.1. Principles of Thoracic and Superficial Structure Ultrasound
 - 10.10.2. Thoracic Ultrasound Scan
 - 10.10.3. Cervical Ultrasound
 - 10.10.4. Other Ultrasound Applications



This program will allow you to advance in your career comfortably"

06 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.

“

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

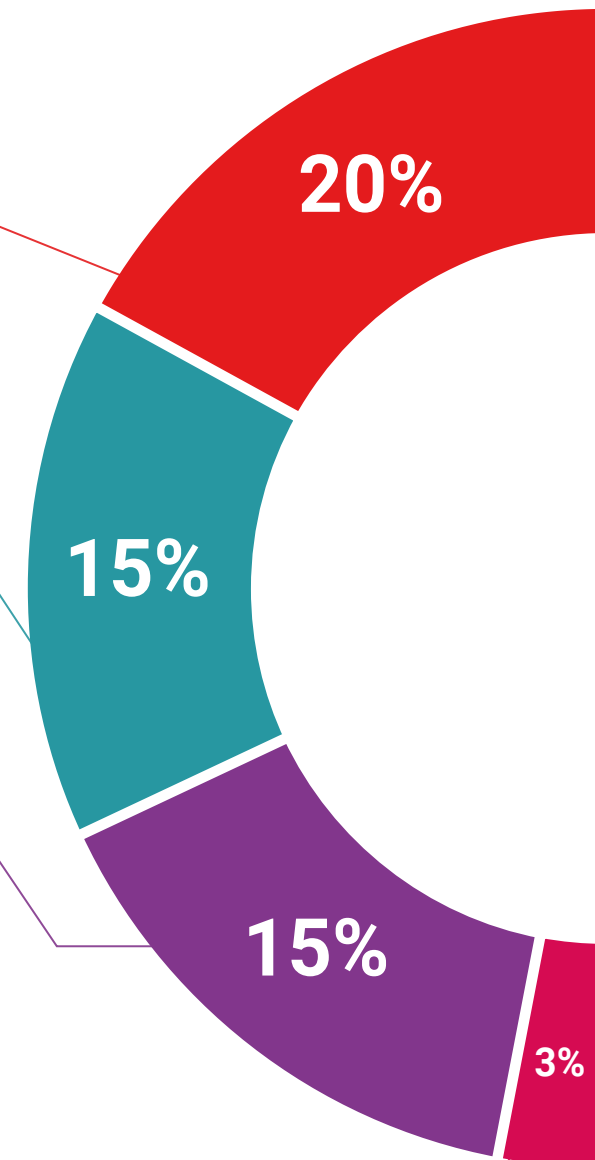
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

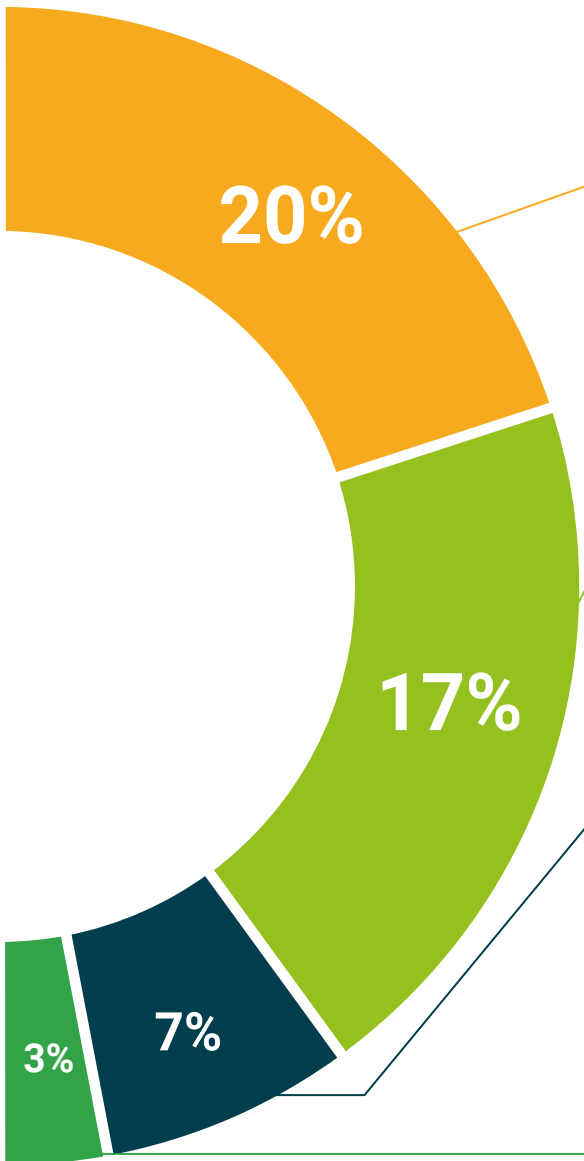
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.



07

Certificate

The Professional Master's Degree in Small Animal Internal Medicine guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Global University.



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*Successfully complete this program
and receive your university degree
without travel or laborious paperwork”*

This program will allow you to obtain your **Professional Master's Degree diploma 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: **Professional Master's Degree in Small Animal Internal Medicine**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



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

Professional Master's Degree in Small Animal Internal Medicine

This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

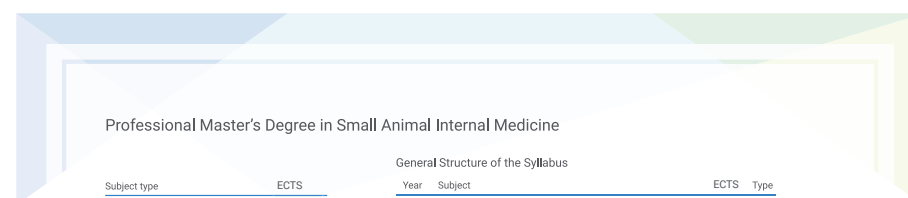
TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

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




Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: APWORD235 techtitle.com/certificates




Professional Master's Degree in Small Animal Internal Medicine

Subject type	ECTS	General Structure of the Syllabus			
		Year	Subject	ECTS	Type
Compulsory (CO)	60	1º	Cardiorespiratory Disorders	6	CO
Optional (OP)	0	1º	Abnormalities in the Digestive System	6	CO
External Work Placement (WP)	0	1º	Abnormalities in the Genitourinary System	6	CO
Master's Degree Thesis (MDT)	0	1º	Neurology	6	CO
	Total 60	1º	Endocrine System Disorders	6	CO
		1º	Infectious Diseases	6	CO
		1º	Ophthalmology	6	CO
		1º	Oncology	6	CO
		1º	Dermatology	6	CO
		1º	Diagnostic Techniques in Internal Medicine	6	CO



Dr. Pedro Navarro Illana
Rector



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

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guarantee accreditation teaching
institutions technology learning
community communitn
personalized service innovation
knowledge present quality
development languages
virtual classroom



**Professional Master's
Degree**
Small Animal
Internal Medicine

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Professional Master's Degree Small Animal Internal Medicine

