

Hybrid Master's Degree Infectious Diseases in Small Animals





Hybrid Master's Degree Infectious Diseases in Small Animals

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Website: www.techtitude.com/us/veterinary-medicine/hybrid-master-degree/hybrid-master-degree-infectious-diseases-small-animals

Index

01

Introduction

p. 4

02

Why Study this Hybrid Master's Degree?

p. 8

03

Objectives

p. 12

04

Skills

p. 18

05

Course Management

p. 22

06

Educational Plan

p. 28

07

Clinical Internship

p. 40

08

Where Can I Do the Clinical Internship?

p. 46

09

Methodology

p. 52

10

Certificate

p. 60

01

Introduction

Every day, veterinary practices deal with patients affected by infectious diseases.

To a large extent, the success of their treatment lies in a quick diagnosis that allows identifying the clinical picture to be faced in order to subsequently proceed to eradicate the infection without room for error. Therefore, it is essential that the expert in this field constantly update their knowledge to accurately address any infectious pathology. With this academic program offered by TECH, the student will learn all the diagnostic and therapeutic innovations for viral, bacterial or parasitic pathologies in a 100% online way. Additionally, after completing the theoretical phase, the student will have a 3-week stay in a prestigious veterinary clinic, in order to transfer everything they have learned to a real environment.





“

Learn how to combat the most complicated infectious conditions in small animals and become a sought-after professional in the veterinary sector”

There are many potentially infectious agents that threaten the health of pets day after day. The lack of prevention and hygiene from their owners degenerates, on numerous occasions, into high-risk situations not only for the affected animal, but also for the rest of the beings living around it. For example, it is difficult to ensure the food and health safety necessary to safeguard the welfare of a child living in the environment of a dog carrying an infectious disease. Additionally, climate change and the ability to move around the globe have led to the emergence of diseases in places where they did not exist before. Under these circumstances, the expert must master the latest advances in Infectious Diseases in Small Animals to respond to these challenges in an efficient way and ensure the health of humans and animals.

For this reason, TECH has created this Hybrid Master's Degree, which seamlessly covers the entire breadth of the casuistry of this field of veterinary medicine, updating the diagnostic and therapeutic procedures of these pathologies based on the latest scientific evidence. Throughout the theoretical learning, the student will learn the new mechanisms of study and analysis of possible vectorial and bacterial diseases for the canine species, as well as the treatment of parasitic diseases in felines. Likewise, they will expand their skills in the approach to zoonoses, present in companion animals and potentially causing health problems in their owners.

All this theoretical phase will be taught in a 100% online mode, which will allow students to manage their own study time to achieve effective learning, adapting their schedules to their own personal or professional needs.

After successfully passing this didactic period, the student will have access to an on-site stay in a first level veterinary clinic where, surrounded by the best experts in infectious diseases, they will assimilate the tools that allow them to transfer to daily professional practice all the knowledge acquired in this program.

This **Hybrid Master's Degree in Infectious Diseases in Small Animals** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ Development of more than 100 clinical cases presented by veterinary professionals specialized in the treatment of infectious diseases in small animals
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Updated diagnostic methods for viral diseases in the canine patient
- ♦ Innovative techniques for the treatment of vector-borne and bacterial diseases
- ♦ Cutting-edge approaches to tropical pathologies in small animals
- ♦ All of this will be complemented by 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
- ♦ Furthermore, you will be able to carry out a clinical internship in one of the best veterinary centers



The cure of infectious diseases in small animals requires a comprehensive knowledge of their treatment. Acquire it with this Hybrid Master's Degree and become a successful professional"

“

Stand out in your career as a veterinarian expert in Infectious Diseases thanks to this Hybrid Master's Degree, taught with the most cutting-edge academic methods"

In this proposal for a Hybrid Master's Degree, of a professional nature and hybrid learning modality, the program is aimed at updating veterinary professionals who work with small animals with infectious diseases. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in veterinary practice, and the theoretical-practical elements will facilitate the updating of knowledge and will allow decision making in the management of the animal.

Thanks to its multimedia content elaborated with the latest educational technology, they will allow the veterinary professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby they must try to solve the different professional practice situations that arise during the course. This will be done with the help of an innovative system of interactive videos made by renowned experts.

This is a high-level academic program, revolutionary in the field of veterinary medicine, which will significantly enhance your growth in a booming professional market.

Seamlessly integrate your daily life with your studies thanks to the possibility of learning at your own pace.



02

Why Study this Hybrid Master's Degree?

In the veterinary field, it is as important to know the latest diagnostic and therapeutic advances as it is to be able to apply them efficiently in the real work environment. With this idea in mind, TECH has created this program, which combines excellent theoretical learning in the field of Infectious Diseases in Small Animals with an internship program of 3 weeks in a prestigious clinical center. Thanks to this, the expert will acquire updated and applicable skills in their daily routine to favor their professional growth.



A close-up photograph of a white animal's fur, likely a dog or cat. A distinct, elongated, red, and irritated patch of skin is visible on the right side of the image, contrasting with the surrounding white fur. The background of the slide is split diagonally from the top-left to the bottom-right, with a teal upper section and a white lower section.

“

This institution offers its students the opportunity to combine an excellent theoretical training in infectious diseases in small animals with a 120-hour internship program in a highly prestigious veterinary clinic"

1. Updating from the latest technology available

The area of Infectious Diseases in Small Animals has undergone numerous modifications in recent years due to the emergence of new drugs, therapies and diagnostic methods to treat these pathologies. Due to this, TECH has created this Hybrid Master's Degree, in order to know and apply all this knowledge in the daily veterinary practice.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

This program has a teaching staff made up of the best veterinarians specialized in infectious diseases, who will provide students with the most professionally applicable knowledge in this field. Likewise, during your internship program, you will be integrated into an excellent work team to acquire the most efficient techniques and approaches in real activity.

3. Entering First-Class Clinical Environments

TECH carefully selects all the centers available for students to carry out their internship program. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Infectious Diseases in Small Animals. In this way, they will be able to see the day to day of a demanding, rigorous and exhaustive area of work, always applying the latest techniques based on scientific evidence in their work methodology.



4. Combining the Best Theory with State-of-the-Art Practice

In the academic market, there are a large number of educational programs that offer hermetic didactic contents without real applicability. For this reason, TECH has created this program, which allows the student to acquire excellent theoretical knowledge and, subsequently, transfer it to practice in a stay in a veterinary center, demonstrating the usefulness in the work environment of everything learned.

5. Expanding the Boundaries of Knowledge

TECH offers the possibility of completing the internship for this program in centers of international scope. In this way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class veterinary clinics in different continents. A unique opportunity that only TECH, the largest online university in the world, could offer.

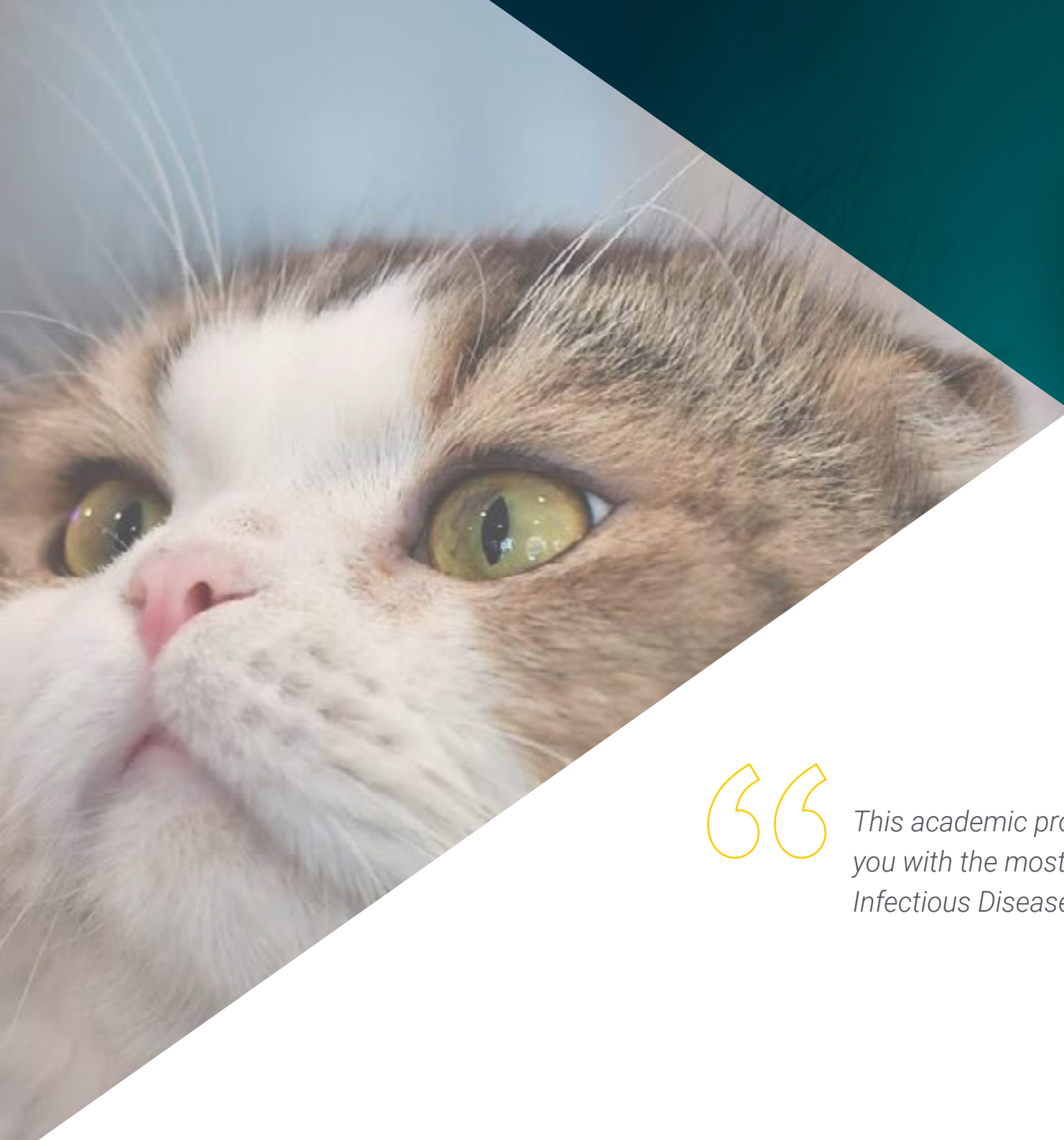
“

*You will have full practical immersion
at the center of your choice”*

03 Objectives

The purpose of this academic program is to offer the Veterinary Medicine professional a high quality resource that allows them to acquire specialized knowledge about the diagnosis and intervention in cases of Infectious Diseases in Small Animals. In short, it seeks to achieve that the student is able to correctly interpret the diagnostic tests, pondering them from the adequate clinical approach to then put into practice the pertinent treatments for the healing of the patient.





“

This academic program was created to provide you with the most updated knowledge on Infectious Diseases in Small Animals"

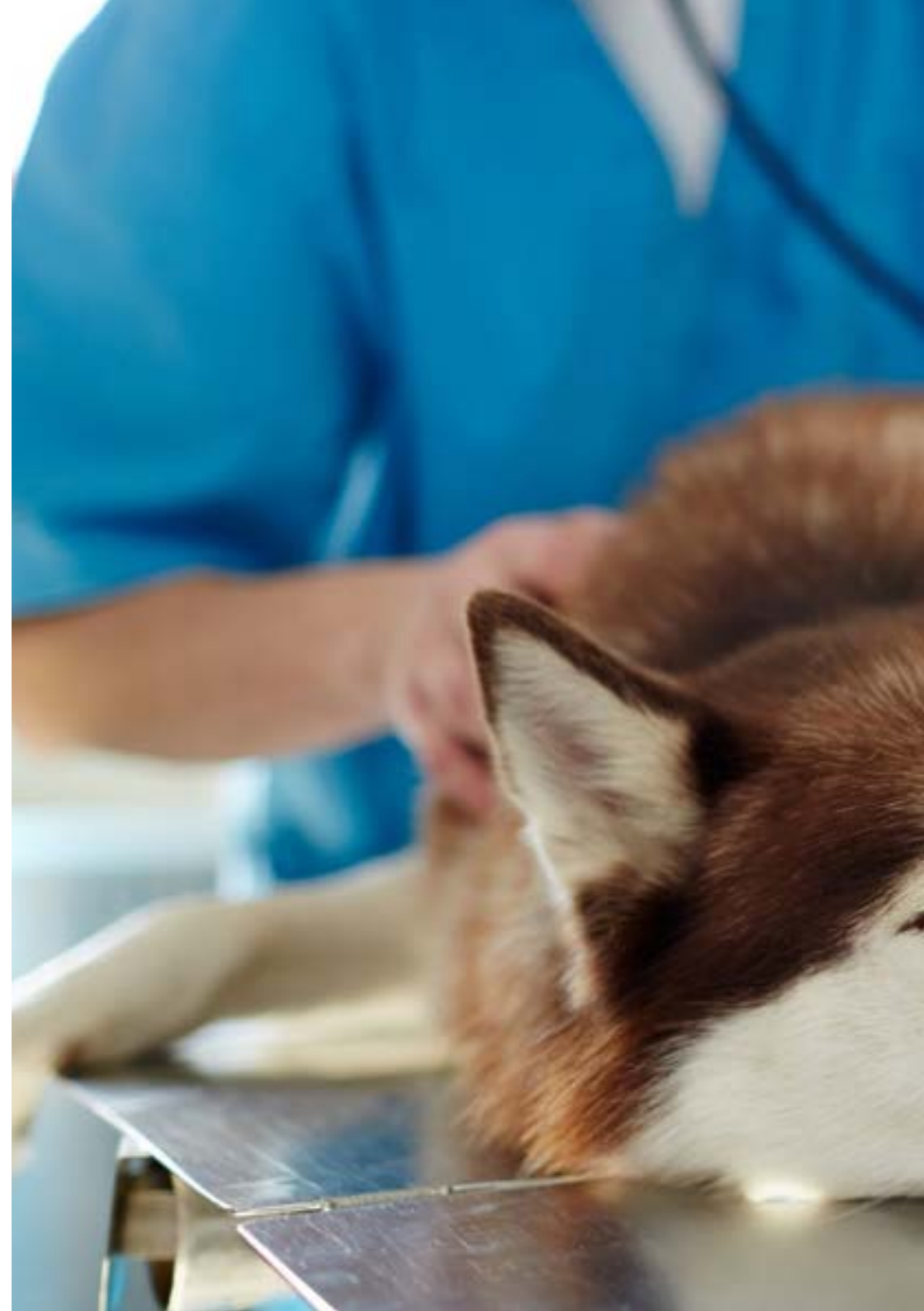


General Objective

- ♦ The general objective of the Hybrid Master's Degree in Infectious Diseases in Small Animals is to achieve that the professional updates the diagnostic and therapeutic procedures of the specialty in a theoretical and practical way, through a first phase of 100 % online teaching and, subsequently, with a veterinary stay designed with clinical and academic rigor, with the help of recognized professionals in a center of the highest scientific quality and technological innovation



*This Hybrid Master's Degree
will update your procedures to
successfully deal with cases of
tropical diseases in small animals"*





Specific Objectives

Module 1. Introduction and Laboratory Diagnosis

- ♦ Examine, at a Technical Level, the differences between the different diagnostic tests
- ♦ Generate specialized knowledge to get the most out of diagnostic tests
- ♦ Determine how to avoid false negatives and interpret false positives
- ♦ Analyze how to effectively perform cytology in clinical practice
- ♦ Establish how to diagnose the most common infectious processes by cytology
- ♦ Make the best clinical use of the available information

Module 2. Infectious Diseases in the Canine Species (I) Viral Diseases

- ♦ Recognize the different clinical pictures of this group of diseases
- ♦ Develop specialized and advanced knowledge to establish a specific diagnosis of these pathologies
- ♦ Present the latest knowledge in the therapeutics of viral diseases affecting domestic dogs

Module 3. Infectious Diseases in the Canine Species (II). Vector and Bacterial Diseases (I)

- ♦ Determine the different clinical pictures with which this group of diseases present themselves
- ♦ Develop specialized knowledge on vector and bacterial diseases to achieve a specific diagnosis of these pathologies
- ♦ Review the latest advances in the therapeutics of vector and bacterial diseases affecting domestic dogs

Module 4. Infectious Diseases in the Canine Species (III). Bacterial (II), Parasitic and Fungal Diseases

- ♦ Examine the different clinical pictures with which this group of diseases present themselves
- ♦ Develop specialized knowledge to carry out a correct and specific diagnosis of these pathologies
- ♦ Present the latest knowledge in the therapeutics of these diseases affecting domestic dogs

Module 5. Infectious Diseases in the Feline Species (I). Viral:

- ♦ Assess the possible routes of transmission and contagion of each disease
- ♦ Analyze the clinical manifestations of viral infections in cats
- ♦ Develop less typical presentations of some diseases
- ♦ Determine which diagnostic techniques are most appropriate and at what time of disease they should be done
- ♦ Clearly interpret laboratory results within a viral disease course
- ♦ Examine the complementary tests necessary to diagnose the infection, establish appropriate therapy and establish a prognosis for the patient
- ♦ Analyze the assessed treatments, their degree of efficacy, adverse effects as well as new therapeutic perspectives

Module 6. Infectious Diseases in the Feline Species (II) Bacteria and Fungi

- ♦ Identify when there may be bacterial involvement in feline respiratory and ocular conditions
- ♦ Examine the types of systemic infections in cats and their manifestations
- ♦ Develop the pictures that can be produced by systemic fungal infections in cats
- ♦ Establish which type of test (cytology, culture, PCR) to carry out in each case
- ♦ Determine the best zone for sample collection
- ♦ Develop the limitations of diagnostic techniques in bacterial diagnosis
- ♦ Analyze diagnostic techniques for monitoring response to treatment
- ♦ Address the different antimicrobial treatments available for the feline species
- ♦ Generate specialized knowledge to choose the ideal treatment based on the antibiogram, the clinical response and the particularities of the patient

**Module 7. Infectious Diseases in the Feline Species (III)
Parasitic and Vector-Borne Diseases**

- ♦ Examine the possible routes of transmission and contagion of each disease
- ♦ Analyze the clinical pictures associated with external and internal parasitosis
- ♦ Determine the diagnostic techniques available for each parasite
- ♦ Elaborate therapeutic protocols for each type of parasitic infection
- ♦ Design a plan of preventive measures to avoid contagion and re-infestations in their patients
- ♦ Develop the measures to be followed to avoid contagion from patients to their owners

Module 8. Tropical Diseases

- ♦ Examine the epidemiological situation of emerging and re-emerging pathogens affecting canines in the tropics
- ♦ Determine the different clinical pictures with which this group of diseases present themselves
- ♦ Offer tools to reach a correct, specific diagnosis of these pathologies
- ♦ Develop the latest knowledge in the therapeutics of these diseases

Module 9. Zoonotic

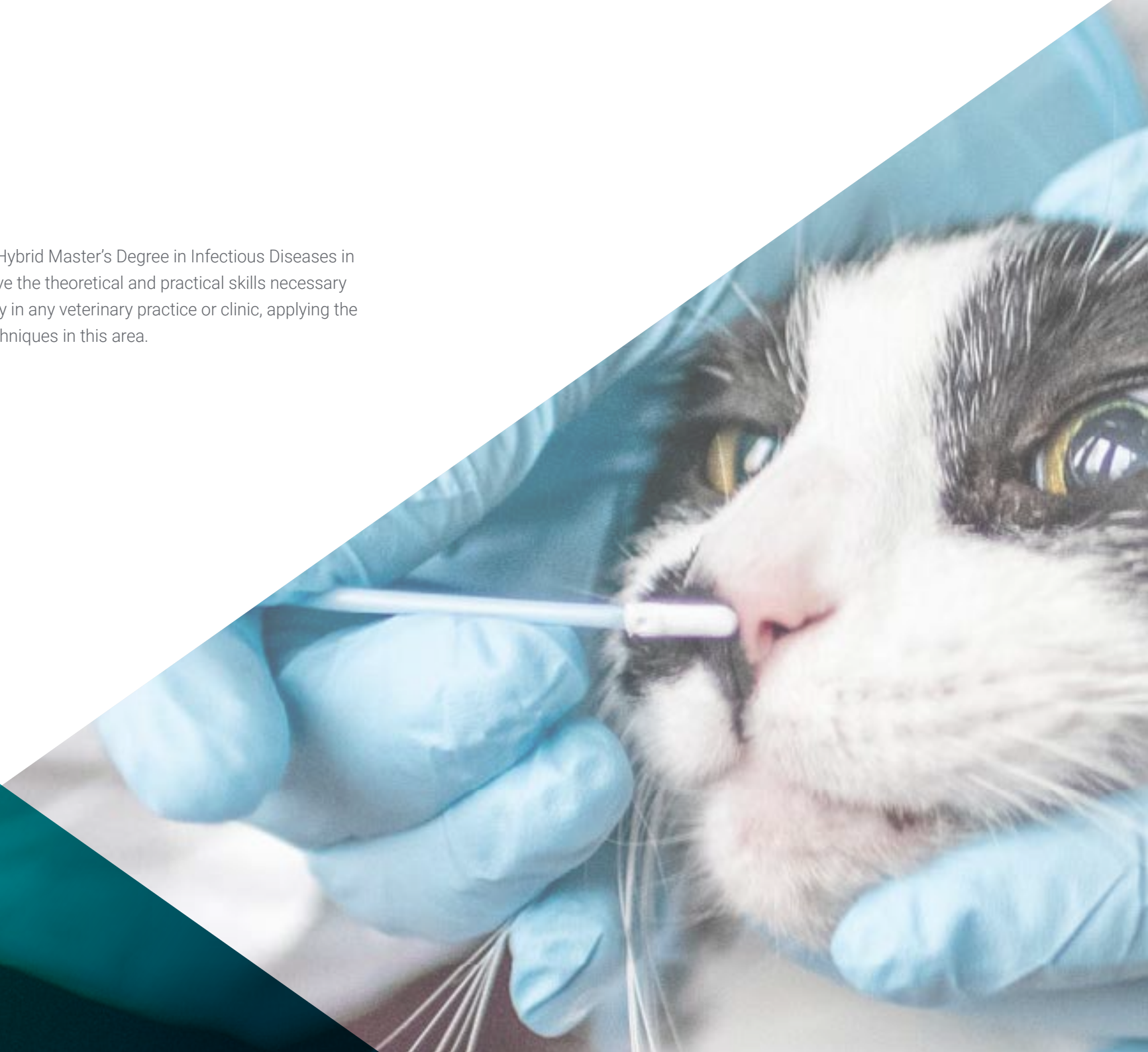
- ♦ Analyze each type of zoonosis in an integral way
- ♦ Examine the prophylactic measures of each zoonosis as control measures
- ♦ Generate specialized theoretical-practical knowledge in the assessment and solution of possible zoonotic risks in the daily practice of the veterinary professional
- ♦ Describe and interpret the dynamics of zoonoses and their interfaces within the small animal clinic
- ♦ Prevent and control possible zoonotic risks in the daily practice of the veterinarian

Module 10. Vaccination and prevention

- ♦ Analyze the differences in vaccination and deworming protocols in patients with high and low risk of disease
- ♦ Address the management of patients with acute or chronic pathologies and establish clear criteria for vaccination and deworming
- ♦ Determine prophylactic methods against infectious diseases in patients under medical treatment
- ♦ Assess the necessary methods of prevention of infectious diseases in special physiological conditions, such as gestation and lactation, and their safety in these conditions
- ♦ Present the factors involved in immunization failures in small animals
- ♦ Identify expected versus undesirable adverse reactions to vaccination and their management
- ♦ Examine the factors involved in the prevention of vector-borne diseases and methods of prevention depending on the vector-borne agent
- ♦ Propose deworming protocols according to the age of the animal, its health status and surrounding environmental conditions
- ♦ Determine the correct sanitary management in canine and feline kennels
- ♦ Develop the methods of action in force in relation to companion animals in disaster situations

04 Skills

After passing the evaluation of the Hybrid Master's Degree in Infectious Diseases in Small Animals, the graduate will have the theoretical and practical skills necessary to work as an expert in this specialty in any veterinary practice or clinic, applying the most advanced procedures and techniques in this area.



“

*By taking this academic program, you
will be part of the global shift towards
excellence in veterinary medicine"*



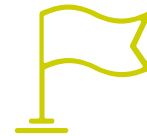
General Skills

- Address, in a safe and effective manner, cases of suspected infectious pathologies in both canine and feline species
- Establish the guidelines to follow for a correct development of clinical practices, as well as the most adequate diagnostic protocol, the most appropriate therapy and the prescription of treatment in an integral way, from the perspective of the patient and their environment
- Promote the necessary measures to avoid contagion and re-infestations
- Offer a better service to the patient in order to guarantee a better quality of life

“

Thanks to this program, you will acquire new knowledge in the prevention of infectious diseases in small animals"





Specific Skills

- ♦ Perform an accurate diagnosis of infectious diseases in dogs and cats
- ♦ Properly perform specimen collection
- ♦ Recognize the most common viral diseases in small animals and plan the approach to them
- ♦ Correctly diagnose diseases caused by hematophagous arthropods
- ♦ Identify diseases derived from bacterial pathogens in dogs
- ♦ Intervene in canine diseases related to bacterial, parasitic, fungal pathogens
- ♦ Decide on the most appropriate route of intervention for each pathology
- ♦ Determine bacterial infections in cats
- ♦ Distinguish the different parasites in cats
- ♦ Combat parasitic infections in cats
- ♦ Managing tropical diseases affecting dogs in tropical countries
- ♦ Recognize and prevent the various zoonoses and their risk in daily clinical practice
- ♦ Implement innovative techniques for the prevention of infectious diseases in small animals

05

Course Management

The teaching staff of this program is made up of a group of internationally renowned veterinarians, experts in Infectious Diseases in Small Animal, who bring to this academic updating program the experience of their years of work in a booming sector. In this way, students can be sure that they will be studying under the guidance of the best professionals in this field. In this way, they will increase their skills to favor the growth of their professional career.



“

You are just a click away to start studying and learning from the best professionals in the veterinary industry to enhance your career"

Management



Dr. Pérez-Aranda Redondo, María

- Veterinary Expert in Dermatology in SKINPET
- Veterinarian at SKINPET in the Veterinary Center of Specialty in Dermatology and Allergy
- Degree in Veterinary Medicine from the University of Córdoba
- Doctor in Pharmacy by the Faculty of Pharmacy of the University of Seville With her study on *Evaluation of the antimicrobial activity of non-conventional chemical entities for their use in Veterinary Dermatology* she obtained a qualification of outstanding *Cum Laude*
- General Practitioner Certificate in Dermatology by the ISVPS
- Author and co-author of numerous publications and communications to national and international congresses, as well as book chapters
- Member: GEDA of AVEPA In the process of accreditation in the Specialty of Dermatology and European Society of Veterinary Dermatology (ESVD)

Professors

Dr. López Cubillo, Laura

- Veterinary Expert in Diagnostic Imaging
- Veterinarian in the Diagnostic Imaging Service at Veterios Veterinary Hospital
- Veterinarian at Gattos Feline Clinic Center
- Internal Veterinarian at the Complutense Clinical Veterinary Hospital
- Degree in Veterinary Medicine, Complutense University Madrid
- Expert in Diagnostic Imaging in Small Animals by CEU Cardenal Herrera University

Dr. Melgarejo Torres, Cristian David

- Veterinarian Expert in the Treatment of Dogs and Cats
- Branch Manager at Agrofield SRL
- Veterinarian at Agrofield SRL
- Teacher in university veterinary studies
- Veterinary Doctor by the National University of Asuncion
- Master's in Animals and Veterinary Sciences from the University of Chile

Dr. Cigüenza del Ojo, Pablo

- ♦ Veterinarian Specialized in Veterinary Oncology
- ♦ Director of Onkos Cancer Institute
- ♦ Owner and Director of CIDVET - Veterinary Diagnostic Cytology
- ♦ Veterinarian at the Puerta de Toledo Veterinary Clinic
- ♦ Veterinarian at the Azuqueca Veterinary Center
- ♦ Professor in veterinary courses and seminars
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Diploma in Cytological Diagnosis in Small Animals by the Complutense University of Madrid
- ♦ Postgraduate Diploma in Small Animal Clinical Oncology by Improve
- ♦ *General Practitioner Oncology* by the European Veterinary School of Postgraduate Studies (EVSPS)

Dr. Márquez Pérez, Juan Antonio

- ♦ Veterinary Expert in Cytology
- ♦ Responsible for the Laboratory and Oncology Area at Fuensalida Veterinary Center
- ♦ Veterinarian in the Laboratory of Clinical Veterinary Analytical Laboratory
- ♦ Veterinarian in the Veterinary Hospital Vetsalud Amigos
- ♦ Degree in Veterinary Medicine from the University of Cordoba
- ♦ Diploma in Cytological Interpretation of Small Animals by the Complutense University of Madrid
- ♦ Senior Technician in Pathological Anatomy and Cytology

Dr. Gómez Poveda, Bárbara

- ♦ Small Animal Veterinary Specialist
- ♦ Veterinary Director at Barvet Home Veterinary Services
- ♦ General Veterinarian at the Parque Grande Veterinary Clinic
- ♦ Emergency and Hospitalization Veterinarian at Las Rozas Veterinary Emergency Center
- ♦ Emergency and Hospitalization Veterinarian at the Parla Sur Veterinary Hospital
- ♦ Degree in Veterinary Medicine, Complutense University Madrid
- ♦ Postgraduate degree in Small Animal Surgery from Improve International
- ♦ Specialization in Diagnostic Imaging in Small Animals at the Autonomous University of Barcelona
- ♦ Specialization in Medicine and Diagnostic Imaging of Exotic Animals at the Autonomous University of Barcelona

Dr. López Lamas, Cristina

- ♦ Clinical Veterinarian Expert in Exotic Animals
- ♦ Clinical Veterinarian at A Marosa Veterinary Center
- ♦ Responsible for the Cardiology Service at the A Marosa Veterinary Center
- ♦ Veterinarian at the Ultramar Veterinary Clinic Hospital
- ♦ Degree in Veterinary Medicine from the USC
- ♦ Postgraduate in Clinical Ultrasound from Improve Iberica
- ♦ General Practitioner Certificate in Clinical Ultrasound from the European School of Veterinary Postgraduate Studies
- ♦ Members: Association of Spanish Veterinarians Specialists in Small Animals (AVEPA) and AVEPA's Working Group in Cardiology

Dr. Martínez González, Jennifer

- ♦ Veterinarian Specialized in Internal Medicine
- ♦ Veterinarian in charge of the Internal Medicine and Endoscopy Service at the Madrid East Veterinary Hospital
- ♦ Veterinarian in several hospital centers
- ♦ Main author of several publications in congresses of AVEPA and AMVAC
- ♦ Author of several articles published in national scientific journals
- ♦ Degree in Veterinary Medicine from Alfonso X El Sabio University
- ♦ European Certificate in Internal Medicine of the ISVPS
- ♦ Postgraduate in Internal Medicine
- ♦ Postgraduate in Endoscopy

Dr. Aldana Moreno, Natalia

- ♦ Veterinarian Specialized in Feline Medicine
- ♦ Veterinarian at Feline Doctor Veterinary Clinic
- ♦ Veterinarian at Lassie Veterinary Medical Center
- ♦ Regular speaker at conferences on Feline Medicine
- ♦ Graduate in Veterinary Medicine from La Salle University
- ♦ Master's Degree in Zoonosis and One Health from the Autonomous University of Barcelona

Dr. Rodríguez Retamero, Anabel

- ♦ Veterinary Expert in Small Animals
- ♦ Veterinarian in several private clinics
- ♦ Professor in training courses for Veterinarians
- ♦ Degree in Veterinary Medicine from CEU Cardenal Herrera University Valencia
- ♦ Postgraduate degree in Small Animal Internal in Medicine from Improve International

Dr. Temsamani Rivero, Nabil

- ♦ Territory Business Manager at Hill's Pet Nutrition
- ♦ Veterinarian at Oasis Wildlife
- ♦ Veterinarian at Reinoso Veterinary Clinic
- ♦ Veterinarian at Granavet Veterinary Clinic
- ♦ Degree in Veterinary Medicine from the University of Cordoba
- ♦ Master's Degree of Business Administration by EAE Business School

Dr. López-Tamayo Picazo, Silvia

- ♦ Veterinary Expert in Internal Medicine and Clinical Oncology for Small Animals
- ♦ Veterinarian in the Internal Medicine, Emergency and Oncology Service at the Alcor Veterinary Hospital
- ♦ Veterinarian at Layos Veterinary Clinic
- ♦ Author and co-author of several scientific publications related to Veterinary Medicine
- ♦ Graduate in Veterinary Medicine from the University of Zaragoza
- ♦ Master's Degree in Clinical Veterinary Oncology by the European University Miguel de Cervantes



Dr. Borrás, Pablo Jesús

- ♦ Veterinary Expert in Infectious and Parasitic Diseases in Small Animals
- ♦ Head of the Infectious and Parasitic Diseases and Travel Medicine Service for Pets at the Panda Veterinary Clinic
- ♦ Researcher in Ecoepidemiology of Tick-Borne Diseases at CENDIE
- ♦ Veterinarian in Small Animal Specialized Clinic
- ♦ Co-author of numerous publications in scientific journals
- ♦ Co-author of the book *Guide to diagnosis and treatment of Rickettsia parkeri spotted fever*
- ♦ Co-author of several book chapters
- ♦ Degree in Veterinary Medicine from the University of Buenos Aires
- ♦ Master's Degree in Prevention and Control of Zoonosis by the National University of the Northwest. Buenos Aires
- ♦ Specialist in Infectious and Parasitic Diseases of Small Animals by the Professional Council of Veterinarians

06

Educational Plan

The educational itinerary outlined by TECH for this Hybrid Master's Degree follows a logical and progressive order in the acquisition of knowledge. After an introduction to the different epidemiologies and diagnostic techniques related to the various bacterial and parasitic diseases, the student is soon immersed in the principles and generalities of the various clinical procedures. Once internalized, the planning foresees the learning of all infectious diseases and their respective treatments from an updated perspective.



“

You will have at your disposal a syllabus based on the latest developments in this sector and designed with the highest scientific rigor"

Module 1. Introduction and Laboratory Diagnosis

- 1.1. Prevalence and Epidemiology of Infectious Diseases in Small Animals
 - 1.1.1. Introduction to the Epidemiology of Infectious Diseases
 - 1.1.2. Epidemiological Characteristics of Infectious Diseases
 - 1.1.3. Prevalence and Clinical Epidemiology
- 1.2. Diagnosis of Viral Diseases
 - 1.2.1. The Role of Viruses in Veterinary Medicine
 - 1.2.2. Viral Isolation
 - 1.2.3. Antigen Detection Techniques by Immunological Techniques
 - 1.2.4. Molecular Techniques (Polymerase Chain Reaction, PCR)
 - 1.2.4.1. The Role of PCR Inhibitors
 - 1.2.5. Histopathology
 - 1.2.6. Serology Testing
 - 1.2.7. Interpretation of Tests in Clinical Diagnosis
- 1.3. Diagnosis of Parasitic Diseases
 - 1.3.1. The Role of Parasites in Veterinary Medicine
 - 1.3.2. The Importance of the Coprological Analysis in the Daily Clinic
 - 1.3.2.1. Coprological Techniques
 - 1.3.3. Hematic Parasites, the Usefulness of Blood Smears
 - 1.3.4. Serology in Parasitic Diseases
- 1.4. Diagnosis of Bacterial and Fungal Diseases
 - 1.4.1. Direct Visualization Under the Microscope
 - 1.4.2. Culture and Identification
 - 1.4.2.1. Urine Culture and CFU
 - 1.4.2.2. Anaerobic Bacteria
 - 1.4.2.3. Interpretation of Antibigrams
 - 1.4.2.4. Saprophyte, Opportunistic or Pathogenic
 - 1.4.3. Molecular Techniques (Polymerase Chain Reaction, PCR)
 - 1.4.4. Serology Testing
 - 1.4.5. Histopathology
- 1.5. Procedures in Clinical Practice
 - 1.5.1. Sampling for Bacterial Cultures
 - 1.5.2. Sampling for Fungal Cultures
 - 1.5.3. Blood Cultures
 - 1.5.4. Anaerobic Cultures
 - 1.5.5. Conservation of Microbiology Samples
 - 1.5.6. Serum or Plasma? Hysop With or Without Medium?
- 1.6. Cytology Applied to Diagnosis. Skin
 - 1.6.1. General Aspects
 - 1.6.2. Techniques for Obtaining Samples
 - 1.6.3. Staining Techniques
 - 1.6.4. Principles of Cytological Interpretation
 - 1.6.4.1. Interpretation of Cell Lines
 - 1.6.4.2. Bacterial Diseases
 - 1.6.4.3. Fungal Diseases
 - 1.6.4.4. Parasitic Diseases
- 1.7. Cytology Applied to Diagnosis. Lymph Nodes
 - 1.7.1. General Aspects
 - 1.7.2. Techniques for Obtaining Samples
 - 1.7.3. Staining Techniques
 - 1.7.4. Principles of Cytological Interpretation
 - 1.7.4.1. Interpretation of Cell Lines
 - 1.7.4.2. Bacterial Diseases
 - 1.7.4.3. Fungal Diseases
 - 1.7.4.4. Parasitic Diseases
- 1.8. Cytology Applied to Diagnosis. Blood and Bone Marrow
 - 1.8.1. General Aspects
 - 1.8.2. Techniques for Obtaining Samples
 - 1.8.3. Staining Techniques
 - 1.8.4. Principles of Cytological Interpretation
 - 1.8.4.1. Interpretation of Cell Lines
 - 1.8.4.2. Bacterial Diseases
 - 1.8.4.3. Fungal Diseases
 - 1.8.4.4. Parasitic Diseases
 - 1.8.4.5. Viral Diseases

1.9. Cytology Applied to Diagnosis. Respiratory and Digestive System

- 1.9.1. General Aspects
- 1.9.2. Techniques for Obtaining Samples
- 1.9.3. Staining Techniques
- 1.9.4. Principles of Cytological Interpretation
 - 1.9.4.1. Interpretation of Cell Lines
 - 1.9.4.2. Bacterial Diseases
 - 1.9.4.3. Fungal Diseases
 - 1.9.4.4. Parasitic Diseases

1.10. Cytology Applied to Diagnosis. Sensory Organs

- 1.10.1. General Aspects
- 1.10.2. Techniques for Obtaining Samples
- 1.10.3. Staining Techniques
- 1.10.4. Principles of Cytological Interpretation
 - 1.10.4.1. Interpretation of Cell Lines
 - 1.10.4.2. Bacterial Diseases
 - 1.10.4.3. Fungal Diseases
 - 1.10.4.4. Parasitic Diseases

Module 2. Infectious Diseases in the Canine Species (I). Viral Diseases

2.1. Distemper

- 2.1.1. Etiological Agent
- 2.1.2. Epidemiology
- 2.1.3. Clinical Manifestations
- 2.1.4. Specific Diagnosis
- 2.1.5. Treatment

2.2. Parvovirus and Enteric Viruses

- 2.2.1. Etiological Agents Involved
- 2.2.2. Epidemiology
- 2.2.3. Pathogenesis
- 2.2.4. Clinical Manifestations and Lesions
- 2.2.5. Specific Diagnosis
- 2.2.6. Treatment

2.3. Canine Herpesvirus

- 2.3.1. Etiological Agent
- 2.3.2. Epidemiology
- 2.3.3. Pathogenesis
- 2.3.4. Clinical Manifestations and Lesions
- 2.3.5. Specific Diagnosis
- 2.3.6. Treatment

2.4. Kennel Cough

- 2.4.1. Etiological Agents Involved
- 2.4.2. Epidemiology
- 2.4.3. Pathogenesis
- 2.4.4. Clinical Manifestations and Lesions
- 2.4.5. Specific Diagnosis
- 2.4.6. Treatment

2.5. Canine Influenza and other Respiratory Viruses

- 2.5.1. Etiological Agents Involved
- 2.5.2. Epidemiology
- 2.5.3. Pathogenesis
- 2.5.4. Clinical Manifestations and Lesions
- 2.5.5. Specific Diagnosis
- 2.5.6. Treatment

2.6. Canine Infectious Hepatitis

- 2.6.1. Etiological Agent
- 2.6.2. Epidemiology
- 2.6.3. Pathogenesis
- 2.6.4. Clinical Manifestations and Lesions
- 2.6.5. Specific Diagnosis
- 2.6.6. Treatment

2.7. Viral Papillomatosis

- 2.7.1. Etiological Agent
- 2.7.2. Epidemiology
- 2.7.3. Pathogenesis
- 2.7.4. Clinical Manifestations and Lesions
- 2.7.5. Specific Diagnosis
- 2.7.6. Treatment

2.8. Rabies and Pseudorabies (Aujeszky's Disease)

- 2.8.1. Etiological Agents
- 2.8.2. Clinical Manifestations
- 2.8.3. Specific Diagnosis
- 2.8.4. Problem Situations
- 2.8.5. Preventive Strategies

2.9. Botulism

- 2.9.1. Etiological Agents
- 2.9.2. Epidemiology
- 2.9.3. Clinical Manifestations
- 2.9.4. Specific Diagnosis
- 2.9.5. Treatment

2.10. Tetanus

- 2.10.1. Etiological Agent
- 2.10.2. Epidemiology
- 2.10.3. Clinical Manifestations
- 2.10.4. Specific Diagnosis
- 2.10.5. Treatment

Module 3. Infectious Diseases in the Canine Species (II). Vector and Bacterial Diseases (I)

3.1. Ehrlichiosis

- 3.1.1. Epidemiology
- 3.1.2. Clinical Manifestations
- 3.1.3. Specific Diagnosis
- 3.1.4. Treatment

3.2. Piroplasmosis or Babesia

- 3.2.1. Etiology and Pathogenesis
- 3.2.2. Host and Transmission
- 3.2.3. Clinical Signs
- 3.2.4. Diagnosis and Treatment

3.3. Anaplasmosis

- 3.3.1. Etiological Agents
- 3.3.2. Epidemiology
- 3.3.3. Clinical Manifestations
- 3.3.4. Specific Diagnosis
- 3.3.5. Treatment

3.4. Hemotropic Mycoplasma

- 3.4.1. Etiological Agents
- 3.4.2. Epidemiology
- 3.4.3. Clinical Manifestations
- 3.4.4. Specific Diagnosis
- 3.4.5. Treatment

3.5. Hepatozoonosis

- 3.5.1. Etiological Agents
- 3.5.2. Epidemiology
- 3.5.3. Clinical Manifestations
- 3.5.4. Specific Diagnosis
- 3.5.5. Treatment

3.6. Visceral Leishmaniasis

- 3.6.1. Etiology and Pathogenesis
- 3.6.2. Host and Transmission
- 3.6.3. Clinical Signs
- 3.6.4. Diagnosis and Treatment

3.7. Neospora and Toxoplasma

- 3.7.1. Etiological Agents
- 3.7.2. Epidemiology
- 3.7.3. Clinical Manifestations
- 3.7.4. Specific Diagnosis
- 3.7.5. Treatment

3.8. Brucellosis

- 3.8.1. Etiological Agents
- 3.8.2. Epidemiology
- 3.8.3. Clinical Manifestations
- 3.8.4. Specific Diagnosis
- 3.8.5. Treatment

- 3.9. Dirofilariasis
 - 3.9.1. Etiological Agents
 - 3.9.2. Epidemiology
 - 3.9.3. Clinical Manifestations
 - 3.9.4. Specific Diagnosis
 - 3.9.5. Treatment
- 3.10. Bartonellosis and borreliosis
 - 3.10.1. Etiological Agents
 - 3.10.2. Epidemiology
 - 3.10.3. Clinical Manifestations
 - 3.10.4. Specific Diagnosis
 - 3.10.5. Treatment

Module 4. Infectious Diseases in the Canine Species (III). Bacterial (II), Parasitic and Fungal Diseases

- 4.1. Leptospirosis
 - 4.1.1. Etiological Agents
 - 4.1.2. Epidemiology
 - 4.1.3. Clinical Manifestations
 - 4.1.4. Specific Diagnosis
 - 4.1.5. Treatment
- 4.2. Mycobacteriosis
 - 4.2.1. Etiological Agents
 - 4.2.2. Epidemiology
 - 4.2.3. Clinical Manifestations
 - 4.2.4. Specific Diagnosis
 - 4.2.5. Treatment
- 4.3. Superficial Mycoses
 - 4.3.1. Dermatophytosis
 - 4.3.1.1. Etiological Agents
 - 4.3.1.2. Epidemiology
 - 4.3.1.3. Clinical Manifestations
 - 4.3.1.4. Specific Diagnosis
 - 4.3.1.5. Treatment

- 4.3.2. Malassezia Dermatitis
 - 4.3.2.1. Etiological Agent
 - 4.3.2.2. Epidemiology
 - 4.3.2.3. Clinical Manifestations
 - 4.3.2.4. Specific Diagnosis
 - 4.3.2.5. Treatment
- 4.4. Deep Mycosis
 - 4.4.1. Etiological Agents
 - 4.4.2. Epidemiology
 - 4.4.3. Clinical Manifestations
 - 4.4.4. Specific Diagnosis
 - 4.4.5. Treatment
- 4.5. Aspergillosis
 - 4.5.1. Etiological Agents
 - 4.5.2. Epidemiology
 - 4.5.3. Clinical Manifestations
 - 4.5.4. Specific Diagnosis
 - 4.5.5. Treatment
- 4.6. Enterobacteriaceae
 - 4.6.1. Etiological Agents
 - 4.6.2. Epidemiology
 - 4.6.3. Clinical Manifestations
 - 4.6.4. Specific Diagnosis
 - 4.6.5. Treatment
- 4.7. Pulmonary Parasitosis
 - 4.7.1. Etiological Agents
 - 4.7.2. Epidemiology
 - 4.7.3. Clinical Manifestations
 - 4.7.4. Specific Diagnosis
 - 4.7.5. Treatment
- 4.8. Gastrointestinal Parasitosis I. Protozoa
 - 4.8.1. Epidemiology
 - 4.8.2. Clinical Manifestations
 - 4.8.3. Specific Diagnosis
 - 4.8.4. Treatment

4.9. Gastrointestinal Parasitosis II. Helminths

- 4.9.1. Epidemiology
- 4.9.2. Clinical Manifestations
- 4.9.3. Specific Diagnosis
- 4.9.4. Treatment

4.10. Protothecosis and Algal Diseases

- 4.10.1. Etiological Agents
- 4.10.2. Epidemiology
- 4.10.3. Clinical Manifestations
- 4.10.4. Specific Diagnosis
- 4.10.5. Treatment

Module 5. Infectious Diseases in the Feline Species (I). Viral

5.1. Feline Leukemia Virus (FeLV). Epidemiology and Etiology

- 5.1.1. Situation in Europe and Latin America
- 5.1.2. Etiopathogenesis and its Relation to Diagnosis
- 5.1.3. Clinical Manifestations

5.2. Feline Leukemia Virus. Clinical Manifestations and Treatments

- 5.2.1. Associated Pathologies
- 5.2.2. Current Treatments. Evidence and Experience

5.3. Feline Immunodeficiency Virus (FIV)

- 5.3.1. Etiopathogenesis
- 5.3.2. Clinical Signs
- 5.3.3. Diagnosis
- 5.3.4. Diseases Associated with FIV Infection
- 5.3.5. Current Treatments

5.4. Feline Coronavirus (FCoV) and Feline Infectious Peritonitis (FIP)

- 5.4.1. Feline Coronavirus. Epidemiology, Etiopathogenesis and Clinical Signs
- 5.4.2. Pathogenesis of Feline Infectious Peritonitis (FIP)
- 5.4.3. Clinical Presentations. Signs and Forms

5.5. Feline Infectious Peritonitis (FIP)

- 5.5.1. Diagnosis: Combining Clinical and Techniques
- 5.5.2. Supportive and Experimental Therapies

5.6. Feline Herpesvirus (FHV)

- 5.6.1. Epidemiology
- 5.6.2. Pathogenesis and its Relationship to Clinical Signs
- 5.6.3. Clinical and Laboratory Diagnosis
- 5.6.4. Supportive and Antiviral Treatments

5.7. Feline Calicivirus (FCV)

- 5.7.1. Epidemiology
- 5.7.2. Pathogenesis
- 5.7.3. Clinical Pictures Associated with FCV and Systemic Virulent Calicivirus (SV-CVF)
- 5.7.4. Laboratory Diagnosis
- 5.7.5. Treatment of FCV-Associated Conditions
- 5.7.6. Supportive Treatment of FCV-VS Infection

5.8. Feline Parvovirus (FPV)

- 5.8.1. Epidemiology
- 5.8.2. Etiopathogenesis and its Relationship to Clinical Signs
- 5.8.3. Laboratory Diagnosis
- 5.8.4. Supportive Treatment of Feline Panleukopenia

5.9. Rabies in Cats

- 5.9.1. Epidemiology. Current Situation in Europe and Latin America
- 5.9.2. Pathogenesis and Clinical Pictures
- 5.9.3. Laboratory Diagnosis
- 5.9.4. Treatment and Prevention

5.10. Other Viruses Affecting Cats

- 5.10.1. Feline Spumavirus
- 5.10.2. Papillomatosis
- 5.10.3. Cowpox
- 5.10.4. Morbillivirus
- 5.10.5. Pseudorabies
- 5.10.6. Avian Influenza (H3N2)
- 5.10.7. SARS-CoV-2

Module 6. Infectious Diseases in the Feline Species (II)

Bacteria and Fungi

- 6.1. Bacteria affecting the Respiratory and Ocular Systems (I)
 - 6.1.1. Respiratory *Mycoplasmas*
 - 6.1.2. *Chlamydiosis*
 - 6.1.3. *Bordetella Bronchiseptica*
- 6.2. Bacteria Affecting the Respiratory and Ocular Systems (II)
 - 6.2.1. *Pasteurella*
 - 6.2.2. *Pseudomonas*
 - 6.2.3. *Klebsiella Pneumoniae*
 - 6.2.4. *Escherichia coli*
 - 6.2.5. Actinomycosis and Nocardiosis
- 6.3. Bacteria Affecting the Digestive System
 - 6.3.1. Bacteria Affecting the Gastrointestinal Tract
 - 6.3.1.1. *Campylobacteriosis*
 - 6.3.1.2. Salmonellosis
 - 6.3.1.3. Clostridiosis
 - 6.3.1.4. *Escherichia coli*
 - 6.3.1.5. *Helicobacter*
 - 6.3.2. Bacterial Cholangitis and Bacterial Cholangiohepatitis
- 6.4. Cutaneous Bacteria
 - 6.4.1. *Streptococcus*
 - 6.4.2. *Staphylococcus*
 - 6.4.3. Abscess-Forming Bacteria
 - 6.4.3.1. Nocardiosis
 - 6.4.3.2. Actinomycosis
 - 6.4.3.3. *Rhodococcus*
 - 6.4.4. Bacteria Involved in Bite Wounds
- 6.5. Bacteria Affecting the Nervous System
 - 6.5.1. *Clostridium Tetani*
 - 6.5.2. *Clostridium Botulinum*
 - 6.5.3. *Escherichia coli*
- 6.6. Bacteria Affecting Other Organs. Nephro-urinary Cardiovascular and Systemic System
 - 6.6.1. Gram-Positive Bacteria
 - 6.6.2. Gram-Negative Bacteria
 - 6.6.3. Bartonellosis
 - 6.6.4. Leptospirosis
 - 6.6.5. Management of the Feline Patient with Sepsis
- 6.7. Hemotropic Mycoplasma
 - 6.7.1. Etiopathogenesis
 - 6.7.2. Epidemiology
 - 6.7.3. Clinical Signs and Diagnosis
 - 6.7.4. Treatment
- 6.8. Mycobacteriosis
 - 6.8.1. Types of Infections
 - 6.8.1.1. Tuberculosis
 - 6.8.1.2. *Mycobacterium Avium* Complex
 - 6.8.1.3. Feline Leprosy
 - 6.8.2. Diagnosis of Mycobacterial Infections
 - 6.8.3. Treatment of Mycobacterial Infections
- 6.9. Cutaneous Mycoses
 - 6.9.1. Dermatophytosis
 - 6.9.2. *Malassezia* Dermatitis
- 6.10. Systemic and Respiratory Mycoses
 - 6.10.1. Cryptococcosis
 - 6.10.2. Blastomycosis
 - 6.10.3. Aspergillosis and Penicilliosis
 - 6.10.4. Histoplasmosis
 - 6.10.5. Candidiasis
 - 6.10.6. Other Mycosis

Module 7. Infectious Diseases in the Feline Species (III). Parasitic and Vector-Borne Diseases

- 7.1. Cutaneous Parasites (I)
 - 7.1.1. Epidemiology: Review of the Current Situation in Europe and Latin America
 - 7.1.2. Fleas
 - 7.1.3. Lice
 - 7.1.4. Ticks
- 7.2. Cutaneous Parasites (II)
 - 7.2.1. Mites
 - 7.2.1.1. *Cheyletiella*
 - 7.2.1.2. Trombicula
 - 7.2.1.3. Demodectic Mange
 - 7.2.1.4. Otodectic Mange
 - 7.2.1.5. Notohedral Mange
 - 7.2.1.6. Sarcoptic Mange
 - 7.2.2. Helminths
 - 7.2.2.1. *Thelazia*
- 7.3. Digestive Parasites (I). Trematodes and Cestodes
 - 7.3.1. Trematodes
 - 7.3.2. Cestodes
 - 7.3.2.1. *Dipylidium*
 - 7.3.2.2. Tapeworms
 - 7.3.2.3. *Echinococcus*
 - 7.3.2.4. Mesocetoides
- 7.4. Digestive Parasites (II). Helminths
 - 7.4.1. *Ancylostoma*
 - 7.4.2. Uncinaria
 - 7.4.3. *Trichostrongylus*
 - 7.4.4. *Toxocara Cati*
 - 7.4.5. *Toxocara Canis*
 - 7.4.6. *Physaloptera*
- 7.5. Digestive Parasites (III). Protozoa
 - 7.5.1. *Cryptosporidium*
 - 7.5.2. *Isospora*
 - 7.5.3. *Sarcocystis*
 - 7.5.4. *Tritrichomonas*
 - 7.5.5. *Giardia*
 - 7.5.6. *Entamoeba*
- 7.6. Respiratory Parasites
 - 7.6.1. *Aleurostrongylus Abstrusus*
 - 7.6.2. *Oslerus*
 - 7.6.3. *Toxocara Cati*
- 7.7. Toxoplasmosis
 - 7.7.1. Prevention
 - 7.7.2. Etiopathogenesis
 - 7.7.3. Clinical Signs
 - 7.7.4. Clinical and Laboratory Diagnosis
 - 7.7.5. Treatment
- 7.8. Vector-Borne Infectious Diseases I
 - 7.8.1. Bartonellosis
 - 7.8.2. Ehrlichiosis
 - 7.8.3. Anaplasmosis
 - 7.8.4. Borreliosis
 - 7.8.5. *Coxiellosis*
- 7.9. Vector-Borne Infectious Diseases II
 - 7.9.1. Babesiosis
 - 7.9.2. *Cytauxzoonosis*
 - 7.9.3. *Hepatozoonosis*
- 7.10. Vector-Borne Infectious Diseases III
 - 7.10.1. *Leishmaniasis*
 - 7.10.2. *Dirofilariasis*

Module 8. Tropical Diseases

- 8.1. Canine *Leishmaniasis* : A View from Latin America
 - 8.1.1. Canine Tegumentary *Leishmaniasis* in Latin America
 - 8.1.2. Canine Visceral *Leishmaniasis* in Latin America
 - 8.1.3. Control and Prevention Measures
- 8.2. Canine Trypanosomiasis
 - 8.2.1. Etiological Agents
 - 8.2.2. Epidemiology
 - 8.2.3. Clinical Manifestations
 - 8.2.4. Specific Diagnosis
 - 8.2.5. Treatment
- 8.3. Rangeliosis and Other Pyroplasmas
 - 8.3.1. Etiological Agents
 - 8.3.2. Epidemiology
 - 8.3.3. Clinical Manifestations
 - 8.3.4. Specific Diagnosis
 - 8.3.5. Treatment
- 8.4. *Gurltia Paralyans* and *Lagochilascaris Spp*
 - 8.4.1. Etiological Agents
 - 8.4.2. Epidemiology
 - 8.4.3. Clinical Manifestations
 - 8.4.4. Specific Diagnosis
 - 8.4.5. Treatment
- 8.5. Feline Sporotrichosis
 - 8.5.1. Etiological Agents
 - 8.5.2. Epidemiology
 - 8.5.3. Clinical Manifestations
 - 8.5.4. Specific Diagnosis
 - 8.5.5. Treatment
- 8.6. Rhinosporidiosis
 - 8.6.1. Etiological Agents
 - 8.6.2. Epidemiology
 - 8.6.3. Clinical Manifestations
 - 8.6.4. Specific Diagnosis
 - 8.6.5. Treatment

- 8.7. Dioctophimosis
 - 8.7.1. Etiological Agents
 - 8.7.2. Epidemiology
 - 8.7.3. Clinical Manifestations
 - 8.7.4. Specific Diagnosis
 - 8.7.5. Treatment
- 8.8. Trematodes in Canines and Felines
 - 8.8.1. Etiological Agents
 - 8.8.2. Epidemiology
 - 8.8.3. Clinical Manifestations
 - 8.8.4. Specific Diagnosis
 - 8.8.5. Treatment
- 8.9. Rabies in the Americas
 - 8.9.1. Background
 - 8.9.2. Epidemiology and Current Situation
 - 8.9.3. Diagnosis, Surveillance and Control
- 8.10. Leptospirosis in the Americas
 - 8.10.1. Background
 - 8.10.2. Epidemiology and Current Situation
 - 8.10.3. Diagnosis, Surveillance and Control

Module 9. Zoonotic

- 9.1. Past, Present and Future of Zoonoses
 - 9.1.1. What are Zoonoses?
 - 9.1.2. Types of Zoonoses
 - 9.1.3. Historical Importance
 - 9.1.4. The Role of the Small Animal Veterinarian
- 9.2. Zoonotic Risk Analysis. Vision *One Health*
 - 9.2.1. Animal Health Risk Analysis
 - 9.2.2. Risk Analysis Terminology
 - 9.2.3. Stages of the Analysis
 - 9.2.4. Perspectives and Limitations

- 9.3. Bacterial I. Campylobacteriosis, Salmonellosis and Clostridiosis
 - 9.3.1. Campylobacteriosis and salmonellosis
 - 9.3.2. Clostridiosis
 - 9.3.3. Risk Factors
 - 9.3.4. Prevention and Control
- 9.4. Bacterial II. Brucellosis, Leptospirosis and Bartonellosis
 - 9.4.1. Brucellosis
 - 9.4.2. Leptospirosis
 - 9.4.3. Bartonellosis
 - 9.4.4. Prevention and Control
- 9.5. Protozoa (I). *Giardiasis* and Toxoplasmosis
 - 9.5.1. *Giardiasis*
 - 9.5.2. Toxoplasmosis
 - 9.5.3. Risk Factors
 - 9.5.4. Prevention and Control
- 9.6. Protozoa (II). *Leishmaniasis* and Cryptosporidiosis
 - 9.6.1. *Leishmaniasis*
 - 9.6.2. Cryptosporidiosis
 - 9.6.3. Risk Factors
 - 9.6.4. Prevention and Control
- 9.7. Nematodes and Cestodes. *Toxocara*, *Dipylidium* and *Echinococcus*
 - 9.7.1. *Toxocara*
 - 9.7.2. *Dipylidium*
 - 9.7.3. *Echinococcus*
 - 9.7.4. Prevention and Control
- 9.8. Viral. Rabies
 - 9.8.1. Epidemiology
 - 9.8.2. Clinical Picture in Humans
 - 9.8.3. Prophylactic and Control Measures

- 9.9. Mange and Dermatophytosis
 - 9.9.1. Mange
 - 9.9.2. Dermatophytosis
 - 9.9.3. Prophylaxis and Control
- 9.10. Antimicrobial Resistance (ARM). Global Risk
 - 9.10.1. Importance of Antimicrobial Resistance
 - 9.10.2. Acquired Mechanisms of Antimicrobial Resistance
 - 9.10.3. Global Strategies for the Reduction of Antimicrobial Resistance

Module 10. Vaccination and prevention

- 10.1. Vaccination in Dogs I
 - 10.1.1. Types of Vaccines
 - 10.1.2. Canine Vaccination Protocol. Primovaccination and Revaccination
 - 10.1.3. Vaccination Under Special Conditions
 - 10.1.4. Action Protocol
 - 10.1.5. Vaccine Reactions
 - 10.1.6. Immunization Failures. Factors Involved
- 10.2. Vaccination in Dogs II
 - 10.2.1. Essential Vaccines
 - 10.2.2. Complementary Vaccines
 - 10.2.3. Non-Recommended Vaccines
- 10.3. Vaccination in Cats I
 - 10.3.1. Feline Vaccination Protocol
 - 10.3.2. Vaccination Under Special Conditions
 - 10.3.3. Action Protocol
 - 10.3.4. Vaccine Reactions. Expected and Undesirable
 - 10.3.5. Immunization Failures. Factors Involved
- 10.4. Vaccination in Cats II
 - 10.4.1. Essential Vaccines
 - 10.4.2. Complementary Vaccines
 - 10.4.3. Non-Recommended Vaccines

- 10.5. Preventive Management of Vector-Borne Diseases
 - 10.5.1. Importance of Vector-Borne Disease Management
 - 10.5.2. Factors Involved
 - 10.5.3. Classification of Vector-Borne Diseases According to the Type of Vector Responsible for Vectors
- 10.6. Preventive Management of External and Internal Parasitosis in Dogs
 - 10.6.1. Importance of Parasitosis Prevention
 - 10.6.2. Factors Involved
 - 10.6.3. Classification of Parasitic Diseases According to the Agent
 - 10.6.3.1. Ectoparasites
 - 10.6.3.2. Endoparasites
 - 10.6.4. Relevance of Combination Therapy
- 10.7. Preventive Management of External and Internal Parasitosis in the Cat
 - 10.7.1. Importance of Parasitosis Prevention
 - 10.7.2. Factors Involved
 - 10.7.3. Classification of Parasitic Diseases According to the Agent
 - 10.7.3.1. Ectoparasites
 - 10.7.3.2. Endoparasites
 - 10.7.4. Relevance of Combination Therapy
- 10.8. Sanitary Management of Kennels
 - 10.8.1. Characteristics of the Facilities
 - 10.8.2. Cleaning. Order and Products to be Used
 - 10.8.3. Vaccination Programs
 - 10.8.4. Deworming Programs
 - 10.8.5. Sanitary Vacuum. Why, When and How to Perform it
- 10.9. Sanitary Management of Catteries
 - 10.9.1. Characteristics of the Facilities
 - 10.9.2. Cleaning. Order and Products to be Used
 - 10.9.3. Vaccination Programs
 - 10.9.4. Deworming Programs
 - 10.9.5. Sanitary Vacuum. Why, When and How to Perform it

- 10.10. Disaster Management
 - 10.10.1. Main Types of Disasters
 - 10.10.1.1. Meteorological Disasters
 - 10.10.1.2. Natural Disasters
 - 10.10.1.3. Biological Disasters Pandemics
 - 10.10.2. Preventive Measures
 - 10.10.2.1. Census of Animals
 - 10.10.2.2. Preparation and Organization of Facilities to be Used as Shelter
 - 10.10.2.3. Personnel and Means of Transport
 - 10.10.2.4. Current Legislation in Force in Cases of Catastrophes in Relation to Companion Animals



Thanks to the 100% online methodology in which the theoretical phase of this Hybrid Master's Degree is taught, you will achieve optimized learning at any time and place"

07

Clinical Internship

After successfully passing all the tests and evaluations of the theoretical part of the Hybrid Master's Degree, the clinical internship will begin. In this case, the student will spend three weeks, equivalent to 120 hours, in the best international centers.





“

*Do your clinical internship in
one of the best international
veterinary centers"*

The practical phase of this Hybrid Master's Degree consists of a 3-week period in a high-level veterinary center, under the guidance of an associate specialist in this sector. This stay will allow the student to see real cases alongside a professional team of reference in the veterinary area, applying the most innovative procedures of last generation in the treatment of infectious diseases.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of veterinary care in areas and conditions that require a high level of qualification, and which are oriented to the specific training for the exercise of the activity, in an environment of safety and high professional performance.

It is undoubtedly an opportunity to learn by working in the innovative veterinary clinic of the future, where the use of updated diagnostic methods and the application of novel treatments is the key to successfully face the infectious diseases of small animals. This is a new way of understanding and integrating health processes, and turns a reference center into the ideal teaching setting for this innovative experience in the improvement of professional skills.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of skill (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners that facilitate teamwork and multidisciplinary integration as transversal skills for the veterinary praxis (learning to be and learning to relate).





The procedures described below will be the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its volume of work, the proposed activities being the following:

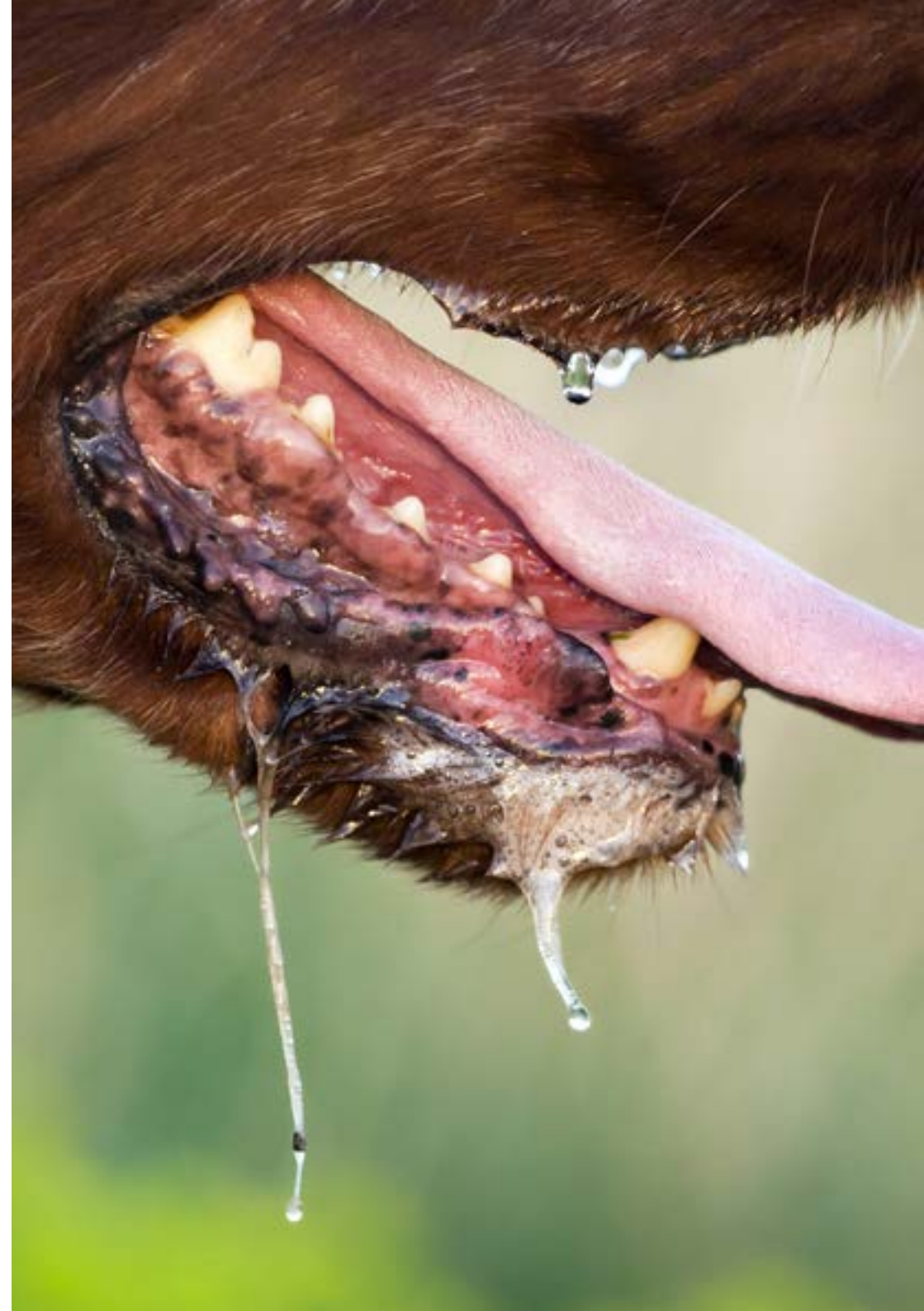
Module	Practical Activity
Introduction and Laboratory Diagnosis	Diagnose possible parasitic diseases in small animals, using the latest coprological techniques
	Undertake diagnosis of bacterial and fungal diseases through direct microscopic visualization or serological testing
	Taking samples for bacterial, fungal cultures, blood cultures and anaerobic cultures
Infectious Diseases in the Canine Species (I). Viral Diseases	Perform an analysis to detect a possible case of rabies in the canine species
	Apply a treatment adapted to the needs of the canine patient for infectious hepatitis
	Specific diagnosis of a case of canine influenza
Infectious diseases in the feline species (II). Bacteria and fungi	Diagnose cases of feline leprosy or tuberculosis
	Treat hemotropic mycoplasmas in the feline species
	Apply the most up-to-date treatments for mycobacterial infections in feline patients
Tropical Diseases	Conduct an evaluation of canine leishmaniasis, using the latest techniques and tools available
	Examine potential cases of feline sporotrichosis and make a definitive diagnosis
	Undertake the most appropriate treatment for rhinosporidiosis based on the characteristics of the animal
Zoonotic	Develop prevention strategies for diseases such as campylobacteriosis, salmonellosis and clostridiosis
	Control of scabies and dermatomycosis, in its different degrees of affection of animals

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the Internship Program period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship program agreement shall be as follows:

1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: the internship Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: the Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

TECH gives you the opportunity to put into practice the theoretical knowledge learned throughout this program in a veterinary center of reference in infectious diseases in animals, with the best experts in this sector. Additionally, TECH adapts to the student's preferences, allowing them to choose the destination that best suits their needs.





“

Through this stay, you will expand your knowledge of infectious diseases in small animals in the best way: hands-on in an exceptional veterinary center!”



Veterinary-medicine

Centro Veterinario San Antón

Country: Spain
City: Madrid

Address: Avenida de la Libertad,
93. Local 14-16, 28770 Colmenar Viejo

Veterinary Center offering personalized attention to different animal species.

Related internship programs:

- Veterinary Anesthesiology
- Veterinary Cardiology in Small Animals



Veterinary-medicine

Hospital Artemisa Cañaveral

Country: Spain
City: Madrid

Address: Francisco Grande Covian, local 1,
28052 Madrid

Veterinary hospital specialized in general care and 24-hour emergency assistance.

Related internship programs:

- Veterinary Anesthesiology
- Veterinary Surgery in Small Animals



Veterinary-medicine

Supervet

Country: Spain
City: Madrid

Address: Calle de Fermín Caballero, 56, 28034 posterior, Madrid

Center specialized in alternative therapies such as homeopathy, acupuncture, physiotherapy, laser or magnetotherapy.

Related internship programs:

- Infectious Diseases in Small Animals
- Veterinary Radiology in Small Animals





Veterinary-medicine

SAVET Sanatorio Veterinario

Country City
Argentina Río Negro

Address: Santa Cruz 1515 General Roca,
Río Negro

Veterinary clinic with supplies and materials
of the latest generation

Related internship programs:

-Veterinary Anesthesiology
-Veterinary Emergencies in Small Animals



Veterinary-medicine

Clínica Veterinaria Don Bosco

Country City
Argentina Buenos Aires

Address: Conquista de Desierto 662,
Ezeiza, Bs. As

Clinic of general and specific specialties of Veterinary
Medicine

Related internship programs:

Veterinary Anesthesiology
-Veterinary Emergencies in Small Animals



Pharmacodynamics.

Clínica Veterinaria Luifran

Country City
Mexico Mexico City

Management: Nte. 7-A 4634, Defensores
de la República, Gustavo A. Madero, 28001
Ciudad de México, CDMX

Veterinary assistance center specialized in dogs and
cats.

Related internship programs:

Veterinary Anesthesiology
- Infectious Diseases in Small Animals



Pharmacodynamics.

Dog City Pet Hospital

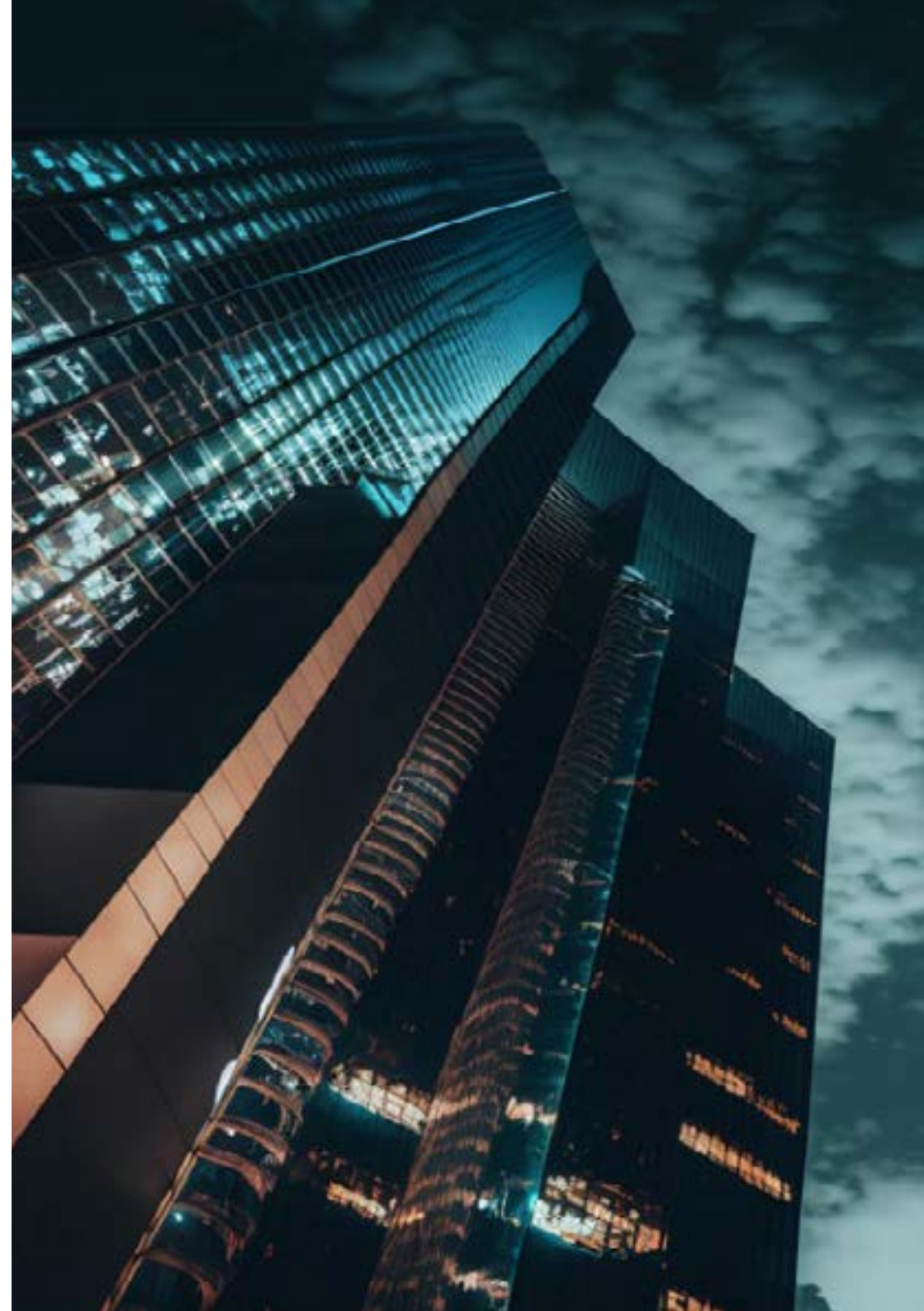
Country City
Mexico Mexico City

Management:
Lago Ginebra 145, Pensil Sur, Miguel
Hidalgo, CP 11490

Veterinary clinic specializing in the care of dogs

Related internship programs:

-Veterinary Anesthesiology
-Veterinary Emergencies in Small Animals



“

Boost your professional career with a holistic teaching, which allows you to advance both theoretically and practically”

09 Methodology

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

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



“

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

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

“

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



Relearning Methodology

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

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

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

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



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



Study Material

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

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



Latest Techniques and Procedures on Video

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



Interactive Summaries

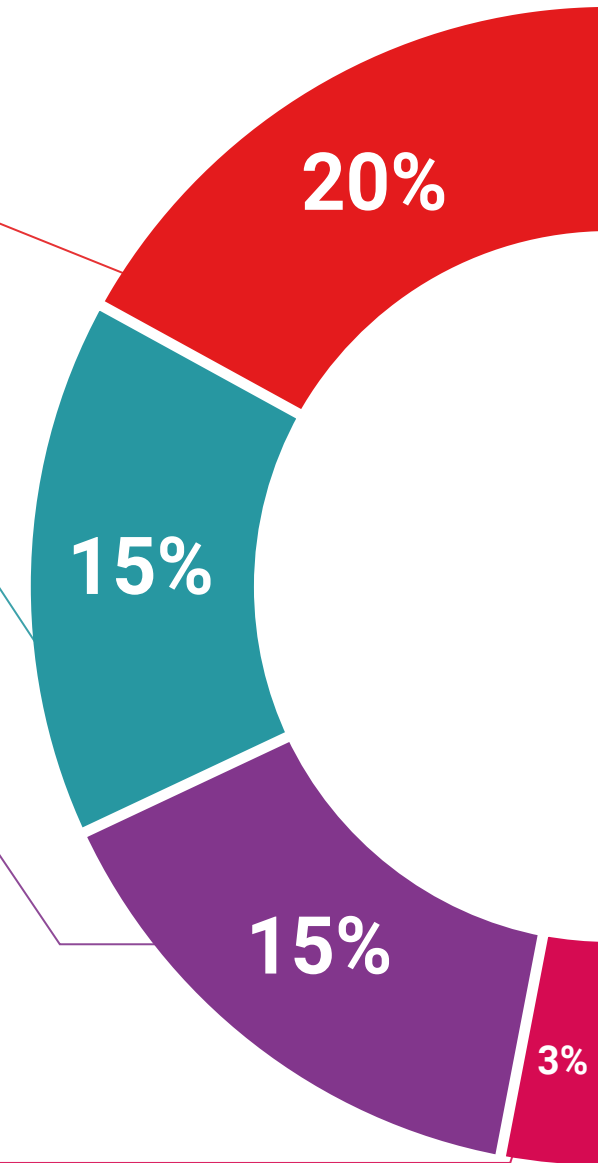
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

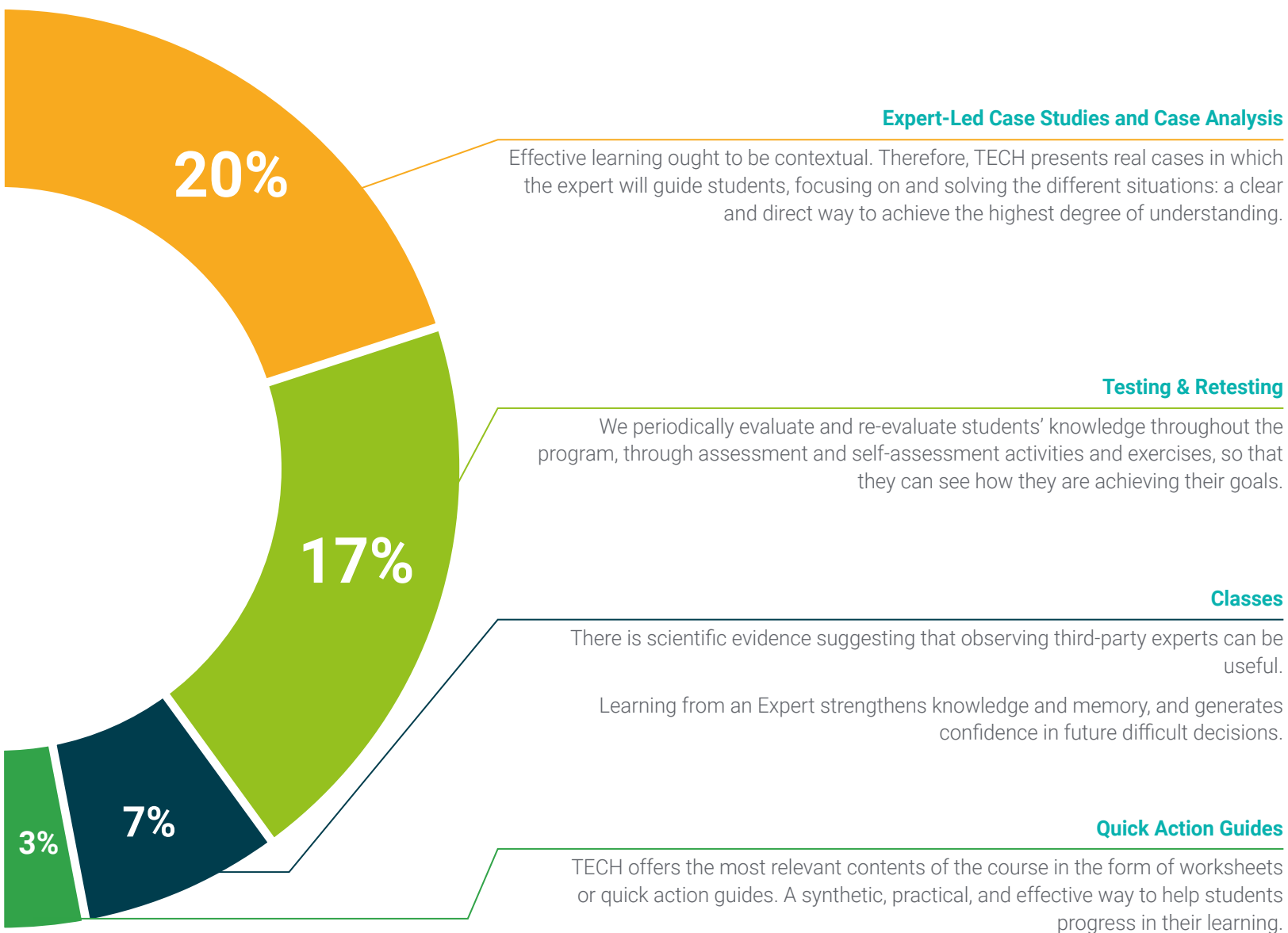
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





10 Certificate

The Hybrid Master's Degree in Infectious Diseases in Small Animals guarantees, in addition to the most rigorous and updated training, access to a Hybrid Master's Degree issued by TECH Global University.



“

*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 **Hybrid Master's Degree diploma in Infectious Diseases in Small Animals** 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.

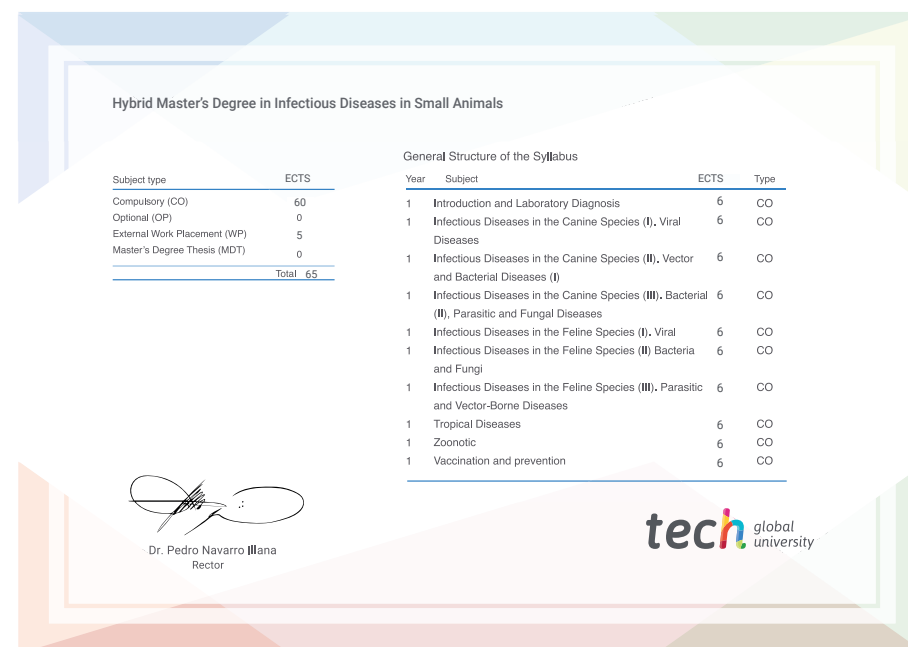
Title: **Hybrid Master's Degree in Infectious Diseases in Small Animals**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**





Hybrid Master's Degree Infectious Diseases in Small Animals

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

Hybrid Master's Degree Infectious Diseases in Small Animals

