

# Professional Master's Degree

## Infectious Diseases in Small Animals





## Professional Master's Degree Infectious Diseases in Small Animals

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/professional-master-degree/master-infectious-diseases-small-animals](http://www.techtute.com/us/veterinary-medicine/professional-master-degree/master-infectious-diseases-small-animals)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 16*

04

Course Management

---

*p. 20*

05

Structure and Content

---

*p. 26*

06

Methodology

---

*p. 40*

07

Certificate

---

*p. 48*

# 01

# Introduction

In veterinary practice, we encounter patients affected by infectious pathologies on a daily basis. Making a good differential diagnosis, which is able to determine as quickly, accurately and clearly the therapeutic scenario in which we find ourselves, is the basis for achieving the best prognosis for our patients. To achieve this, it is of utmost importance that the professional is up to date, in order to have the necessary mental and practical background to act with expertise and success. This comprehensive program is the most intensive and up-to-date tour of the latest and most complete advances and developments in this field.





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*You will learn to analyze the most frequent clinical signs of the most common viral diseases in small animals”*

Vector-borne diseases, i.e., hematophagous arthropods, are a group of different entities produced by bacteria, viruses, protozoa and helminths. They are considered emerging (and sometimes non-emerging) in daily canine clinical practice. These diseases produce a great diversity of clinical pictures, they can be asymptomatic or can cause the death of the animal. Infectious diseases caused by parasites (Nematodes, Protozoa, Trematodes and Cestodes) are frequent in dogs, generally with gastrointestinal symptoms; the group of pulmonary parasites produces emerging pathologies in the patient.

Enterobacteriaceae are another cause of gastrointestinal diseases in the dog that include zoonotic bacteria of potential risk to the patient. To a lesser degree, within the differential diagnoses, some species of algae also generate chronic conditions that affect the digestive system of dogs. Viral diseases in the feline species are often difficult for the small animal veterinarian to deal with. Some diseases present typical clinical signs, while others have different manifestations and present pictures similar to other pathologies or even neoplasms.

Due to the particularities of the cat, there are certain differences in the approach with respect to the dog, such as specific bacteria of the feline species and typical bacterial and fungal clinical pictures. Among the parasites affecting the feline species, the clinic is always more familiar with those most frequently diagnosed and most prevalent.

For all these reasons, the interest in this field has been increasing in recent years, which is why TECH offers this 100% online program, designed by experts in Small Animal Infectious Diseases, through only 12 months of specialization, 100% online and tailor-made by experts in Small Animal Infectious Diseases. Graduates are, therefore, guaranteed an academic experience that can be perfectly combined with any other work activity, which will allow them to update and perfect their professional skills in a guaranteed manner.

This **Professional Master's Degree in Infectious Diseases in Small Animals** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practising experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-evaluation and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Supplementary documentation databases are permanently available, even after the program



*An educational program based on the best working methods of the online educational panorama, revolutionary in the veterinary field”*

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*Each and every area of knowledge needed regarding infectious diseases in small animals, clearly, comprehensively and effectively presented”*

Its teaching staff includes professionals belonging to the field of Veterinary Medicine, who bring to this educational program the experience of their work, as well as renowned 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 study in real situations.

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

*High-impact program that will give you the qualifications you need to act as an expert in this field of work.*

*Fully compatible with your daily life activities, it will allow you to learn in a constant and gradual way, at your own pace, without losing educational effectiveness.*



02

# Objectives

The objective of this program is to provide veterinary medicine professionals with a high-quality resource that allows them to be fully up to date, integrating into their theoretical and practical knowledge the latest advances and developments in the treatment of small animals in the field of infectious diseases.







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*Feel accompanied by a highly prestigious teaching team that will provide you with the latest news on Infectious Diseases in Small Animals"*



## General objectives

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- ♦ Interpret diagnostic tests and their clinical relevance
- ♦ Improve collection, storage and transport of specimens
- ♦ Determine the advantages and limitations of the use of cytology
- ♦ Develop specialized theoretical and practical knowledge for the diagnosis and treatment of the most common viral diseases affecting dogs
- ♦ Generate specialized theoretical and practical knowledge to carry out a correct diagnosis and treatment of the diseases transmitted by hematophagous arthropods (vectors) and produced by bacterial pathogens that most frequently affect domestic dogs
- ♦ Generate specialized theoretical and practical knowledge in the diagnosis and treatment of diseases caused by bacterial, parasitic and fungal pathogens that most frequently affect domestic dogs
- ♦ Analyze the most frequent clinical signs of viral diseases
- ♦ Establish the steps for a correct diagnosis and monitoring of the clinical evolution
- ♦ Determine the most effective therapies in each of the diseases, specific and supportive
- ♦ Generate specialized knowledge to carry out a correct follow-up of the feline patient with these diseases
- ♦ Examine the clinical picture suggestive of bacterial infection in cats
- ♦ Determine the presentations of mycotic infection in the feline species
- ♦ Establish diagnostic tests according to clinical suspicion
- ♦ Establish the antimicrobial therapy of choice depending on each pathology
- ♦ Examine the most frequent types of parasites in cats and their distribution
- ♦ Analyze when there is clinical suspicion of a parasitic infection
- ♦ Address the diagnostic techniques available for each pathology
- ♦ Develop the available treatments for parasitic infections approved for use in cats
- ♦ Determine the zoonotic potential of each feline parasitic disease
- ♦ Generate specialized knowledge on the most frequent tropical diseases affecting dogs so that the veterinary clinician can recognize them and establish a diagnostic and therapeutic pathway
- ♦ Develop theoretical and practical knowledge about zoonoses of importance in small animal clinics
- ♦ Analyze, from a multidisciplinary aspect, the risk in daily clinical practice
- ♦ Respond to the current needs of the veterinary professional with an integral and holistic vision
- ♦ Justify and apply the term "One Health" in daily clinical practice
- ♦ Examine the different strategies for the prevention and control of the main zoonoses in the small animal clinic
- ♦ Compile the fundamental knowledge and competences related to the prevention of infectious diseases in small animals
- ♦ Adequately establish vaccination protocols for the most common infectious pathologies and their adaptation according to the intrinsic conditions of each patient
- ♦ Delve into the prophylactic methods available for the prevention of vector diseases
- ♦ Develop methods for the prevention of external and internal parasitosis in small animals
- ♦ Determine the importance of establishing an individual protocol adapted to the needs and/or characteristics of each patient
- ♦ Offer the most updated prophylactic methods, according to the latest studies in this field



## Specific objectives

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### 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 in order to reach a specific diagnosis of these pathologies
- ◆ Examine 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 findings within a viral disease program
- ♦ 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**

- ◆ Determine 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
- ◆ Determine which type of test (cytology, culture, PCR) to carry out in each case
- ◆ Establish 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

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*A path to achieve education and professional growth that will propel you towards a greater level of competitiveness in the employment market”*

# 03 Skills

After passing the assessments of the Professional Master's Degree in Infectious Diseases in Small Animals, the professional will have acquired the necessary skills to act diagnostically and therapeutically in cases of infectious diseases, both in theory and in real practice, with the solvency that provides the support of the most up-to-date knowledge of the international veterinary panorama.





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*Acquire the real skills of an expert in infectious diseases of dogs and cats and make a quality leap in your professional practice”*



## General skills

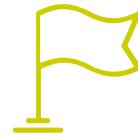
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- Address, in a safe and effective manner, cases of suspected infectious pathologies in both canine and feline species
- Establish the guidelines to follow for a correct management, the most adequate diagnostic protocol, the most appropriate therapy and the prescription of the treatment in an integral way, from the perspective of the patient, their environment and the necessary measures to avoid contagion and reinfestations
- Offer a better service to the patient with the objective of providing a better quality of life to the pets

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*Improve the care of your patients by taking advantage of the education offered by the Professional Master's Degree in Infectious Diseases in Small Animals”*





## Specific skills

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- ♦ Make an accurate diagnosis of infectious diseases in dogs and cats
- ♦ Know how to properly perform specimen collection
- ♦ Recognize the most common viral diseases in dogs
- ♦ Plan the approach to these diseases
- ♦ Correctly diagnose diseases caused by hematophagous arthropods
- ♦ Identify diseases derived from bacterial pathogens in dogs
- ♦ Intervene in canine diseases related to bacterial, parasitic or fungal pathogens
- ♦ Intervene in cases of viral diseases
- ♦ Decide on the most appropriate route of intervention in each case in cats and dogs
- ♦ Recognize bacterial infections in cats
- ♦ Establish the most appropriate route of intervention in each case
- ♦ Distinguishing the different parasites in cats
- ♦ Combat parasitic infections in cats
- ♦ Know the tropical diseases affecting dogs in tropical countries
- ♦ Apply the most advanced therapeutics in this field
- ♦ Be able to recognize and prevent the various zoonoses and their risk in daily clinical practice
- ♦ Perform effective preventive techniques for the prevention of infectious diseases in small animals

# 04

# Course Management

The quality of the educational process has one of its pillars in the excellence of the teaching staff. For this reason, we choose our teachers from among the best in the most advanced countries in this area of work. Thanks to this, you will have the opportunity to learn from the best qualified professionals. Experts, who will put their real experience at the service of specialization and who, in addition, have proven to have the best teaching qualifications. For the sake of quality, which is the hallmark of our identity.





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*A teaching staff chosen from among the best in the industry, which will allow you to learn in a realistic way, with a complete, practical and current vision of the work in this field of veterinary medicine”*

## Management



### Ms. Pérez-Aranda Redondo, María

- Head of the Dermatology Service at Simbiosis Veterinary Specialties Center; Veterinarian at Aljarafe Norte Veterinary Center
- Dermatology and Diagnostic Cytology Service Manager
- Veterinary clinic of the Canitas veterinary center in East Seville
- Responsible for the Dermatology and Cytological Diagnosis Service of all Canitas Veterinary Centers
- Honorary Collaborator of the Department of Animal Medicine and Surgery in Dermatology
- Collaborating Student of the Department of Animal Medicine and Surgery in Dermatology

## Professors

### Dr. Laura López Cubillo

- ◆ Degree in Veterinary Medicine, Complutense University Madrid
- ◆ Postgraduate course in Diagnostic Imaging in small animals by the CEU Cardenal Herrera University of Valencia
- ◆ Attendance to congresses, courses and conferences on Internal Medicine, Feline Medicine, Diagnostic Imaging and Emergency and Intensive Care at national level
- ◆ Currently, resident at the Diagnostic Imaging Service of the Complutense Veterinary Hospital of Madrid
- ◆ Responsible for the Emergency Department at Gattos Feline Clinical Center Hospital
- ◆ Resident in the Internal Medicine, Diagnostic Imaging and Emergency Department at Gattos Feline Clinical Center Hospital
- ◆ Rotating internship at Gattos Hospital Feline Clinical Center

### Dr. Cigüenza del Ojo, Pablo

- ◆ Onkos Director
- ◆ Clinical Veterinarian
- ◆ Degree in Veterinary Medicine from the Complutense University of Madrid Diploma in Cytological Diagnosis of Dogs and Cats from the UCM
- ◆ Professional Master's Degree in Small Animal Clinical Oncology by Improve
- ◆ General Practitioner in Oncology by the European Veterinary School of Postgraduate Studies (EVSPS)

### Dr. Juan Antonio Márquez Pérez

- ◆ Consultant veterinarian, interpretation of cytology and results of laboratory tests, and handling of analyzers at the Clinical Veterinary Analytical Laboratory -ACVLAB-, Valencia, Spain
- ◆ Degree in Veterinary Medicine from the University of Cordoba
- ◆ Higher Technician in Pathological Anatomy and Cytology at IES Ribera del Tajo, Talavera de la Reina, Spain
- ◆ Dermatological conferences. AVETO. Speaker Carlos Vich Cordón. Toledo
- ◆ Oncology in daily clinical practice with Ricardo Ruano Barneda and Nacho Molina Angulo. AVETO
- ◆ Speaker at the Conference on Cytology and its usefulness in daily clinical practice, AVETO in Toledo

### D. Melgarejo Torres, Cristian David

- ◆ University Professor Technical University of Marketing and Development. Department of Veterinary Sciences. San Lorenzo, Paraguay
- ◆ AGROFIELD S.R.L. Clinical and surgical care to dogs and cats. Branch Manager
- ◆ Veterinary Doctor. National University of Asuncion
- ◆ Professional Master's Degree in Animal and Veterinary Sciences. University of Chile
- ◆ PhD student Autonomous University of Barcelona
- ◆ Processing of COVID-19 Samples. National Animal Health and Quality Service (SENACSA)

**Dr. Gómez Poveda, Bárbara**

- ◆ Director and Head Veterinarian at Barvet-Veterinariat home
- ◆ General Veterinarian at Parque Grand Veterinary Clinic
- ◆ Degree in Veterinary Medicine, Complutense University Madrid
- ◆ Postgraduate in Small Animal Surgery (GPCert SAS)
- ◆ Specialization in Diagnostic Imaging in Small Animals
- ◆ Specialization in Medicine and Diagnostic Imaging in Exotic Animals

**Dr. López Lamas, Cristina**

- ◆ Co-owner and co-founder of A Marosa Veterinary Center, Brussels
- ◆ Degree in Veterinary Medicine from the University of Santiago de Compostela
- ◆ Postgraduate in Clinical Ultrasonography of Small Animals
- ◆ Member of the Association of Spanish Veterinarians Specializing in Small Animals AVEPA

**Dr. Martínez González, Jennifer**

- ◆ Veterinarian in charge of the internal medicine service at the Veterinary Hospital Madrid Este
- ◆ Veterinary Degree from Alfonso X El Sabio University
- ◆ Postgraduate Degree in Small Animal Medicine from Improve International
- ◆ Course in veterinary clinic management at UC Berkeley

**Dr. Aldana Moreno, Natalia**

- ◆ Co-founder of Etcovet
- ◆ Degree in Veterinary from the University of La Salle, Colombia
- ◆ Professional Master's Degree in Zoonosis & One Health from the Autonomous University of Barcelona

**Dr. Rodríguez Retamero, Anabel**

- ◆ Veterinarian in charge of the Internal Medicine service at Bluecare Veterinary Specialties Hospital
- ◆ Degree in Veterinary Medicine from Cardenal Herrera CEU University, Valencia, Spain
- ◆ Postgraduate Degree in Small Animal Internal Medicine from Improve International
- ◆ Course of Basic Surgery and course of Anesthesia of the Postgraduate Diploma in Soft Tissue Surgery and Anesthesia by the Autonomous University of Barcelona
- ◆ Trainer of veterinary clinical teams and ATVs (HCV Montigalá)

**Dr. Tamsamani Rivero, Nabil**

- ◆ Exotic and Wildlife Veterinarian at Oasis Wildlife Fuerteventura
- ◆ Degree in Veterinary Medicine from the University of Cordoba
- ◆ MBA (Master of Business Administration) by EAE Business School
- ◆ Intern in the Department of Internal Medicine at the University of Cordoba

**Dr. López-Tamayo Picazo, Silvia**

- ◆ Veterinarian in the Internal Medicine, Emergency and Oncology Department of the Alcor Veterinary Hospital, in Alcalá de Henares, Madrid
- ◆ Graduate in Veterinary Medicine from the Faculty of Veterinary Medicine of the University of Zaragoza
- ◆ Professional Master's Degree in Veterinary Clinical Oncology, Own Title issued by the European University Miguel de Cervantes and AEVA





#### **D. Borrás, Pablo Jesús**

- ◆ Head of the Infectious, Parasitic Diseases and Traveler's Medicine Service at Panda Veterinary
- ◆ Teacher of Parasitology, Parasitic Diseases, Parasitic Diseases in animal production, Parasitic Diseases in large animal clinics, Parasitic Zoonoses
- ◆ Postgraduate Courses at FVET (UBA)
- ◆ Parasitology for Biotherium Technicians
- ◆ Degree in Veterinary Medicine from the School of Veterinary Sciences, University of Buenos Aires, Argentina of Buenos Aires
- ◆ Magister in Prevention and Control of Zoonosis at the Northeast University of Buenos Aires
- ◆ Specialist in Infectious and Parasitic Diseases of Small Animals by the Professional Council of Veterinary Doctors (CPMV)

05

# Structure and Content

This program has been designed with a specific teaching model that successfully combines the intensity of a comprehensive and complete study with a highly flexible way of learning. A knowledge journey that addresses each and every area of professional development that the veterinarian needs in the field of small animal infectious diseases.





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*A unique teaching model that reconciles distance specialization with practical learning, allowing the professional to progress in their care capacity by studying with the best teaching program on the online market”*

## 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 System (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. Nephrourological, 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. Mesocestoides
- 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 Paralyzans 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. Dioctophimososis
  - 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 Cat 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



*It advances towards excellence with the help of the best professionals and teaching resources of the moment”*

# 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.







“

*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. Gervas, 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 Nursing in Infectious Diseases in Small Animals guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.







“

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

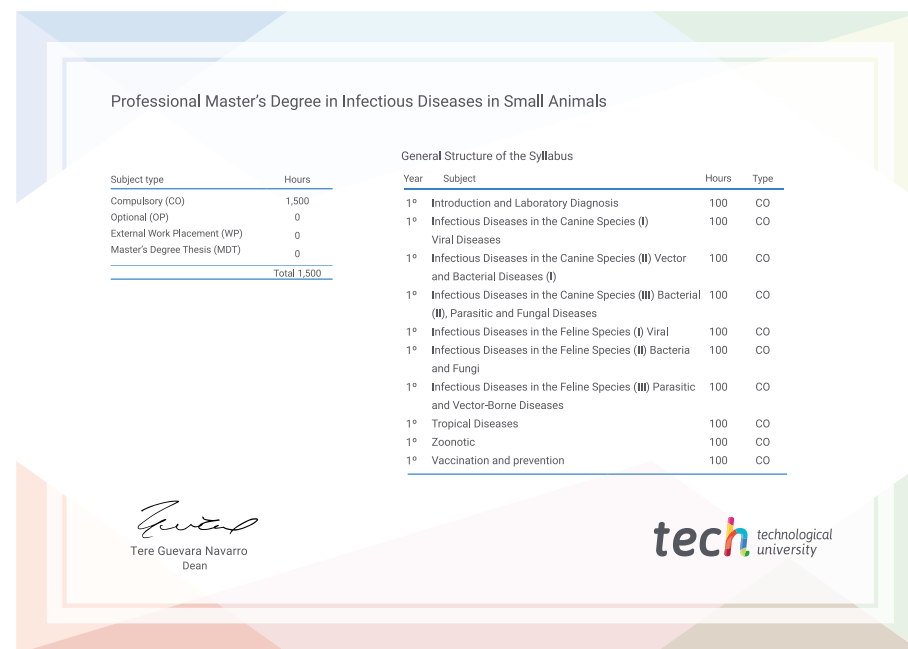
This **Professional Master's Degree in Infectious Diseases in Small Animals** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

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

Official N° of hours: **1,500 h.**



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

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



## Professional Master's Degree

Infectious Diseases  
in Small Animals

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Infectious Diseases in Small Animals

