

# Postgraduate Certificate

## Parasitic Dermatoses





## Postgraduate Certificate Parasitic Dermatitis

- » Modality: online
- » Duration: 2 months
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/parasitic-dermatosis](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/parasitic-dermatosis)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

---

*p. 30*

# 01

# Introduction

Ectoparasite Parasitic Dermatitis are skin diseases caused by the presence or overgrowth of certain parasites in the skin. They are very common diseases that have their own specific characteristics.

When facing a suspected case of parasitic etiology, it is important to be very strict and meticulous with the tests to be performed, many of them will be very routine and therefore sometimes we can make mistakes.

For all these reasons, dermatoses caused by ectoparasites are a group of diseases of great interest in the daily veterinary dermatological practice.





“

*Veterinarians must continue their training to adapt to new developments in this field”*

The skin, along with its characteristics, is considered to be an active organ in the induction and maintenance of the immunological response. Cutaneous microbiota also contribute in a very important way to the defensive mechanisms of the skin. This training covers all these mechanisms and specifies the resident and transitory organisms of the skin.

Dermatology is possibly the specialty within pet veterinary medicine that is most frequently encountered in daily clinical practice. Because of this, and taking into account its importance, this Postgraduate Certificate has been developed by a highly regarded veterinary teaching team in Veterinary Dermatology.

The combination of experience, both theoretical and practical, allows the veterinary professional to develop, first hand, specialized knowledge to carry out a good diagnosis and treatment of dermatological diseases from the theoretical point of view, with the latest developments and scientific advances and from the extensive practical experience of all teachers. The combination of a great team of interrelated teachers is what makes this Postgraduate Certificate unique among all those offered in similar courses.

The topics developed in this Postgraduate Certificate address, in-depth, the most important small animal dermatoses, including dogs, cats and other non-traditional pets.

With this Postgraduate Certificate veterinary professionals acquire advanced knowledge of Veterinary Dermatology for daily clinical practice. The study system applied by this university provides a solid foundation in the specialized knowledge of the Physiopathology of the skin and latest generation dermatological therapeutics.

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

This **Postgraduate Certificate in Parasitic Dermatitis** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of case studies presented by Small Animal Dermatology experts.
- ◆ 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.
- ◆ Breakthroughs in Dermatology in Small Animals
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Special emphasis on innovative methodologies in Small Animal Dermatology
- ◆ 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



*Don't miss the opportunity to study this Postgraduate Certificate with us. It's the perfect opportunity to advance your career and stand out in an industry with high demand for professionals"*

“

*This Postgraduate Certificate is the best investment you can make when choosing a refresher program to update your existing knowledge of Veterinary Dermatology”*

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 education programmed to learn 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 experts in Dermatology in Small Animals and with extensive experience.

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

*This 100% online Postgraduate Certificate will allow you to balance your studies with your professional work while increasing your knowledge in this field.*





02

# Objectives

This Postgraduate Certificate in Parasitic Dermatitis is aimed at facilitating veterinary professionals' performance with the latest advances and most innovative treatments in the sector.







“

*Learn about the latest advances in the field from the comfort of your home, thanks to the online format on which this program is based”*



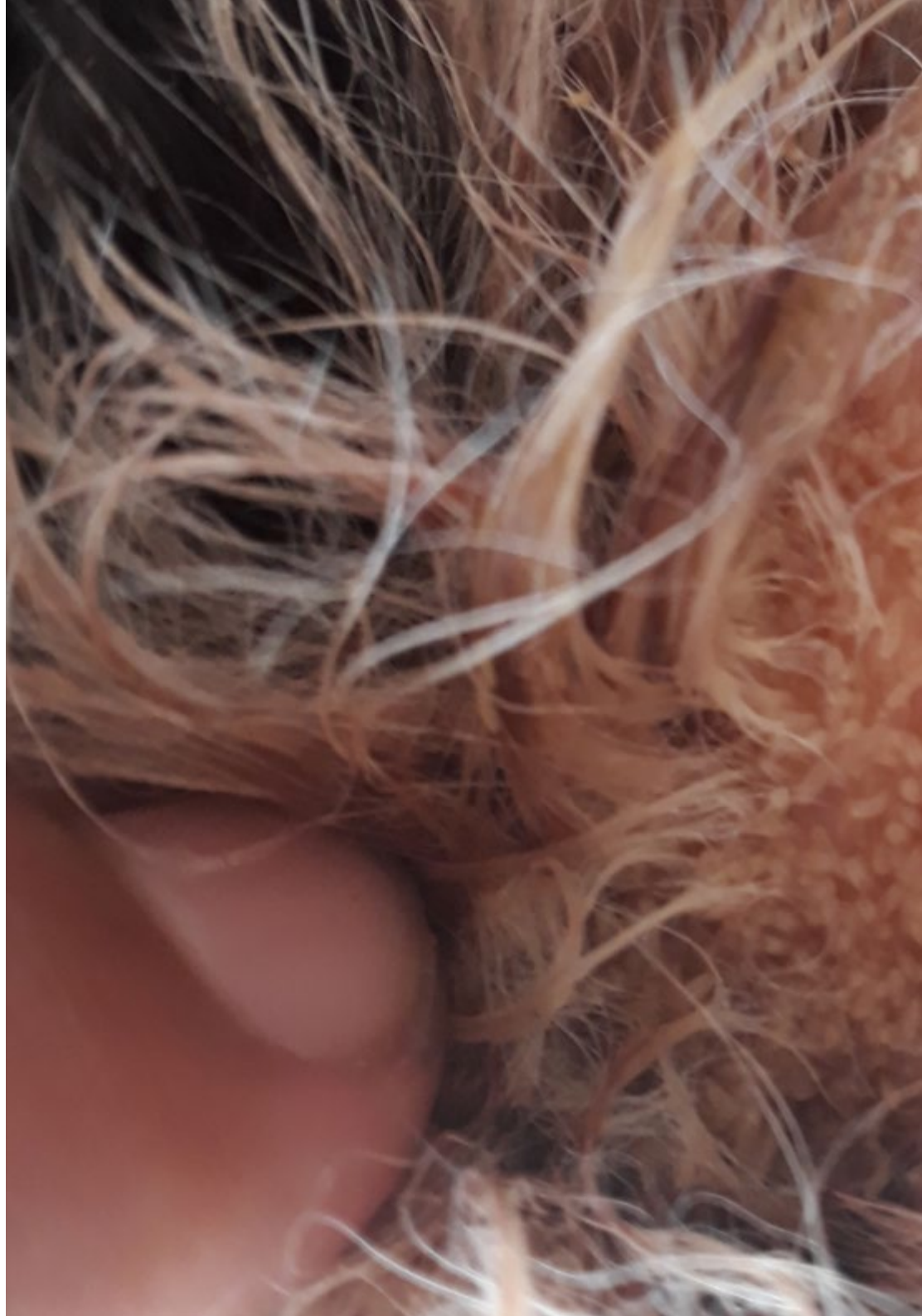
## General objectives

---

- Generate specialized and advanced knowledge regarding the skin
- Determine its pathophysiology in the general clinic of the individual as a whole
- Identify the main ectoparasites that cause dermatosis
- Examine the most frequent and common Parasitic Dermatitis in daily clinical practice



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





## Specific objectives

---

- ♦ Specify the working methodology when the presence of a cutaneous autoimmune or immune-mediated disease is suspected
- ♦ Identify the differences between the various groups of autoimmune and immunomediated diseases
- ♦ Establish the differential diagnoses of auto-immune and immune-mediated diseases according to their injury pattern and clinical presentation
- ♦ Examine the classification of autoimmune and immune-mediated diseases
- ♦ Establish the most relevant autoimmune and immunomediated diseases in the canine and feline species
- ♦ Update the therapeutic approach to immune-mediated and autoimmune diseases
- ♦ Analyze the importance of the skin barrier
- ♦ Determine the fundamental role of cytology in the diagnostic approach
- ♦ Establish the differential diagnoses of superficial and deep pyodermas
- ♦ Analyze the use of the antibiogram and its correct reading in pyodermas
- ♦ Delve into current studies on resistant pyodermas and define the most appropriate treatments
- ♦ Addressing the rational use of antibiotics in pyodermas
- ♦ Recognize the clinical features and differential diagnosis of canine and feline mycoses
- ♦ Examine the different diagnostic methods for canine and feline mycoses
- ♦ Select the most appropriate therapies for the control of canine and feline mycoses
- ♦ Identify the dermatological and systemic symptoms of canine leishmaniasis
- ♦ Select the most appropriate diagnostic techniques in each case for protozoal dermatoses
- ♦ Define the most current and appropriate treatments to control canine leishmaniasis
- ♦ Identify the symptomatology and the most up-to-date treatment of the less common dermatoses covered in the module



03

# Course Management

This program's teaching staff includes leading experts Parasitic Dermatitis who contribute their vast work experience to this specialization program. They are world-renowned veterinarians from different countries with proven theoretical and practical professional experience.







“

*Our team of teachers, with expertise in dermatology in small animals, will help you reach success in your profession"*

## International Guest Director

Dr. Domenico Santoro is an eminence in the field of **Veterinary Dermatology**. He is the **only specialist in his field to hold dual certification**, one granted by the American College of Veterinary Microbiologists (ACVM) in Bacteriology/Micology and Immunology, and the other by the Board of the American College of Veterinary Dermatology.

His career has been marked by the study of host-microbe interactions that occur in **Canine Atopic Dermatitis**. As a result of these analyses, he has developed the **evaluation of skin defense peptides**, quantifying at the molecular and protein level the expression of these products in the skin of healthy and affected dogs.

Santoro is a highly respected leader in the scientific community whose main commitment is to **continuous innovation** to promote excellence in veterinary dermatology. In the course of his clinical work, he has deepened his knowledge of the **cutaneous immune response** of dogs with Leishmaniasis, aerobic bacteria and other pathologies caused by allergens. He has also mastered cutaneous cryotherapy and laser skin surgery in pets.

In his career he also stands out for being **one of the three main researchers** in charge of the direction of the Laboratory of Comparative Dermatology of the University of Florida. From this **study center he promotes the “One Health” perspective** that investigates the development of simultaneous defenses between dogs and humans for dermatological diseases.

At the same time, he has been part of animal research departments at the **prestigious North American universities** of North Carolina and Illinois. Through his experiences, he became one of the founding members of the **International Committee for Allergic Diseases in Animals (ICADA)**. As a result, he has several dozen scientific publications in some of the most prestigious veterinary journals.

Position: Principal Investigator in the Laboratory of Comparative Dermatology at the University of Florida.





## Dr. Santoro, Domenico

---

- Veterinarian at the University of Florida Veterinary Hospital
- Assistant Professor at the University of Florida College of Veterinary Medicine
- Doctor of Veterinary Science from the University of Illinois at Urbana-Campaign
- Residency Veterinary Residency at North Carolina State University
- Veterinary Degree at the University of Naples "Federico II"
- Member of: American College of Veterinary Microbiologists, American College of Veterinary Dermatology, European College of Veterinary Dermatology

“

*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### Dr. Machicote Goth, Gustavo

- ♦ Veterinarian, University of Buenos Aires
- ♦ Homologated to the Spanish Bachelor's Degree Degree homologated for all purposes to the Spanish Bachelor's Degree in 1987
- ♦ Head of DERMASET Dermatology Referral Service in Santiago de Compostela and Vilanova de Arousa
- ♦ Member of the Scientific Committee of the GEDA (Dermatology Specialist Group of AVEPA) Secretary of the GEDA 2004-2008 Full member of the ESVD
- ♦ Certificate in Dermatology by the ESAVS in Vienna 2002 - 2003 - 2005 Accredited in the specialty of Dermatology by AVEPA
- ♦ Full Member of the European Society of Veterinary Dermatologists ESVD
- ♦ Member of AVEPA of Galicia, from January 2002 to 2006

## Professors

### Dr. Sancho Forreland, Pedro Javier

- ♦ Degree in Veterinary Medicine, Faculty of Zaragoza, 1986
- ♦ Member of GEDA's scientific committee since 1995
- ♦ Member of the ESVD, AVEPA y GEDA
- ♦ Accredited in dermatology by AVEPA in 2014 and reaccredited in 2019
- ♦ Professor of the Dermatology Update course of the Madrid Veterinary College in three editions (2016, 2018 and 2019)





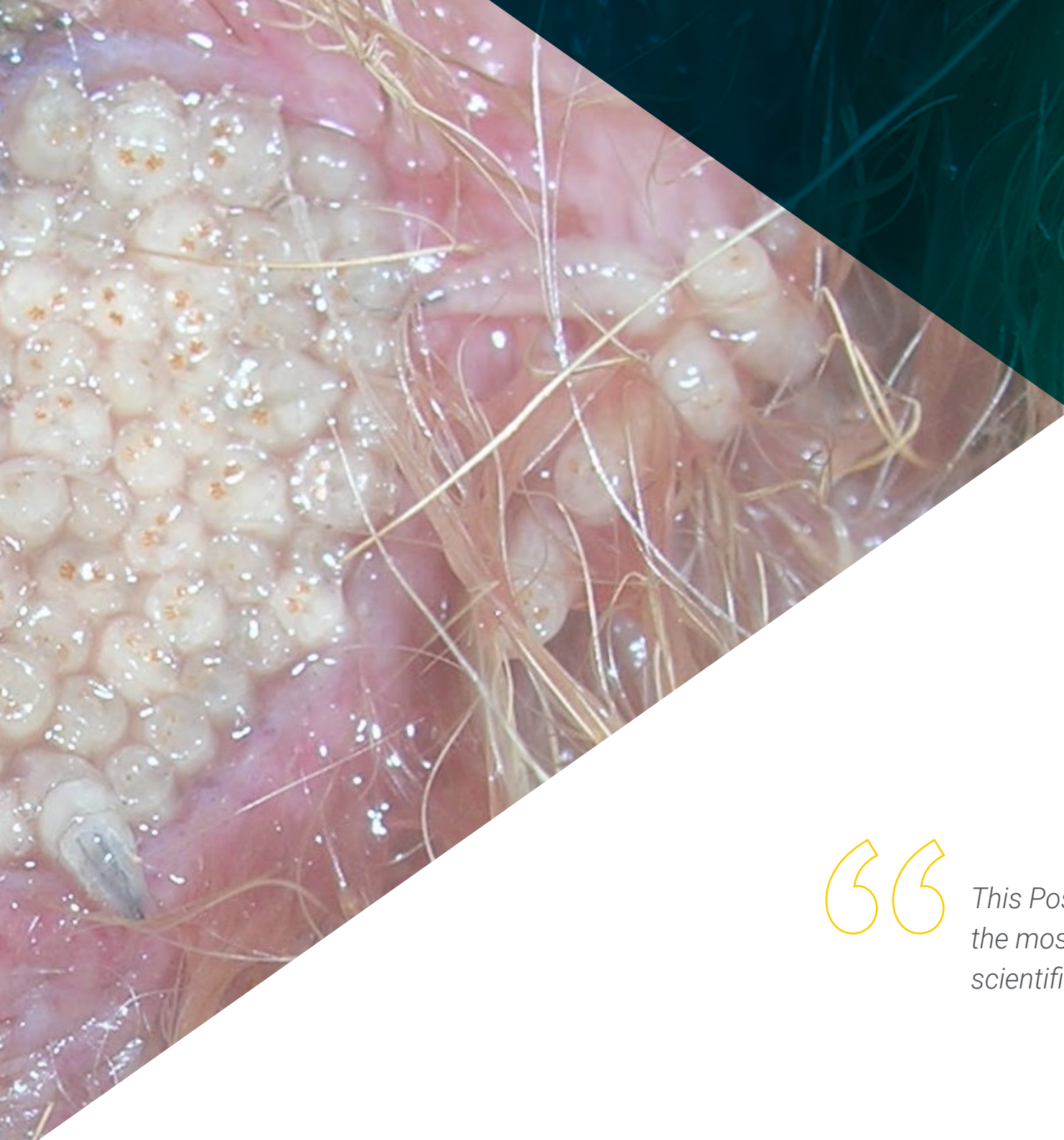
# 04

# Structure and Content

The structure of the content has been designed by the best professionals in the Dermatology in Small Animals sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary medicine.







“

*This Postgraduate Certificate contains the most complete and up-to-date scientific program on the market”*

## Module 1. The Skin as an Organ Characteristics and Diagnostic Approach

- 1.1. Structure and Function of the Skin
  - 1.1.1. Epidermis
  - 1.1.2. Dermis
  - 1.1.3. Cutaneous Appendages
  - 1.1.4. Hypodermis
  - 1.1.5. Vascularization and Innervation
- 1.2. Dermatological Consultation
  - 1.2.1. Material for Sample Collection
  - 1.2.2. Material for Clinical Examination
  - 1.2.3. Material for Complementary Tests
- 1.3. Relationship with the Owner
  - 1.3.1. Objectives
  - 1.3.2. Personalized Care
  - 1.3.3. Allocation of Sufficient Time
- 1.4. Diagnostic Protocol
  - 1.4.1. Dermatological Record
  - 1.4.2. General Medical Records
  - 1.4.3. Dermatological Medical Records
- 1.5. General and Dermatological Examination
  - 1.5.1. Primary Skin Lesions
  - 1.5.2. Secondary Skin Lesions
  - 1.5.3. Clinical Patterns
- 1.6. Differential Diagnoses
  - 1.6.1. Most Common Dermatoses
  - 1.6.2. Least Common Dermatoses
- 1.7. Complementary Diagnostic Tests
  - 1.7.1. Skin Scraping
  - 1.7.2. Trichogram
  - 1.7.3. Hair Brushing
  - 1.7.4. Adhesive Tape
  - 1.7.5. Imprint
  - 1.7.6. Cultivation Methods
  - 1.7.7. Skin Biopsy:

- 1.8. Skin Cytology
  - 1.8.1. Sample Collection
  - 1.8.2. Processing and Staining
  - 1.8.3. Interpretation
- 1.9. Cutaneous histopathology
  - 1.9.1. Inflammatory Patterns
  - 1.9.2. Atrophic Patterns
  - 1.9.3. Neoplasm Patterns
- 1.10. Treatments. Overview
  - 1.10.1. Topical:
    - 1.10.1.1. Shampoo
    - 1.10.1.2. Solution
    - 1.10.1.3. Foams
    - 1.10.1.4. Wipes
  - 1.10.2. Systemic
    - 1.10.2.1. Oral
    - 1.10.2.2. Parenteral Route

## Module 2. Dermatoses of Parasitic Origin

- 2.1. Introduction
- 2.2. Parasitosis by Insects
  - 2.2.1. Fleas
  - 2.2.2. Lice
  - 2.2.3. Mosquitoes
  - 2.2.4. Hymenoptera
  - 2.2.5. Myiasis and Fly Dermatitis
- 2.3. Parasitosis by Arachnids
  - 2.3.1. Ticks
  - 2.3.2. Other Rare Arachnids
- 2.4. Parasitosis by Superficial Mites
  - 2.4.1. *Cheyletiella*
  - 2.4.2. *Neothrombicles*
  - 2.4.3. *Otodectes Cynotis*





- 2.5. Parasitosis by Plough/Profundus Mites
  - 2.5.1. *Sarcoptes Scabiei*
  - 2.5.2. *Notoedres Cati*
- 2.6. Parasitosis by Follicular Mites I
  - 2.6.1. Demodex
    - 2.6.1.1. History
    - 2.6.1.2. Biological/Habitat Cycle
    - 2.6.1.3. Species of *Demodex*
    - 2.6.1.4. Immunology and Pathogenesis of Demodicosis
  - 2.6.2. Canine Demodicosis
    - 2.6.2.1. Clinical Picture: Clinical Polymorphism
    - 2.6.2.2. Juvenile Canine Demodicosis vs. Adult
    - 2.6.2.3. Treatment and Prevention
- 2.7. Parasitosis by Follicular Mites II
  - 2.7.1. Feline Demodicosis
  - 2.7.2. *Straelensia Cynotis*
- 2.8. Parasitosis by Helminth
  - 2.8.1. *Ancylostoma*
  - 2.8.2. *Uncinaria*
  - 2.8.3. *Pelodera*
- 2.9. Caterpillar Larvae: Processionary
  - 2.9.1. Other Rare Ectoparasites
- 2.10. External Antiparasitic Agents Key Aspects: Pharmacokinetics
  - 2.10.1. Presentations
  - 2.10.2. Topical Action
  - 2.10.3. Systemic Action

# 05 Methodology

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

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





“

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



## At TECH we use the Case Method

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

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



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

“

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

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

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



## Relearning Methodology

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

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



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



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

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

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

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

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





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



### Study Material

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

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



### Latest Techniques and Procedures on Video

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



### Interactive Summaries

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

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



### Additional Reading

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





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

# Certificate

This Postgraduate Certificate in Parasitic Dermatoses guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.





“

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

This program will allow you to obtain your **Postgraduate Certificate in Parasitic Dermatitis** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Parasitic Dermatitis**

Modality: **online**

Duration: **2 months**

Accreditation: **12 ECTS**



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

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present quality

online transactions

development languages

virtual classroom

**tech** global  
university

## Postgraduate Certificate Parasitic Dermatoses

- » Modality: online
- » Duration: 2 months
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online



# Postgraduate Certificate

## Parasitic Dermatitis

