



## Postgraduate Certificate

## Feline Bacterial and Fungal Diseases

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/veterinary-medicine/postgraduate-certificate/feline-bacterial-fungal-diseases

# Index

> 06 Certificate

> > p. 28





## tech 06 | Introduction

When establishing an adequate therapy, it is necessary to take into account aspects such as the differences in the cat's physiology and management both in the clinic and at home, in order to guarantee an adequate compliance with the antimicrobial therapy.

In this program we will focus on the clinical presentations of bacterial and fungal pathologies in cats, how to combine them with laboratory diagnosis as a guide for the clinician and how to approach antimicrobial treatment in a comprehensive manner in this species in order to choose the ideal antibiotic, improve compliance and decrease the rate of antibiotic resistance.

New therapies, approaches and medications, in a highly educational Postgraduate Certificate"

This **Postgraduate Certificate in Feline Bacterial and Fungal Diseases** 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
- Intensely visual teaching system, supported by graphic and schematic contents, 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 course



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

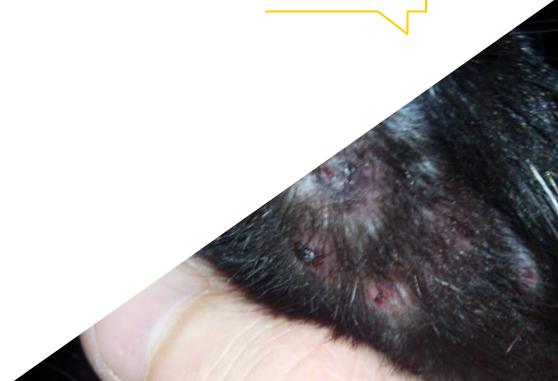
Its teaching staff includes professionals belonging to the field of Veterinary Medicine, who bring to this program the experience of their work, as well as renowned specialists from reference societies and prestigious universities.

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 education programmed to learn in real situations.

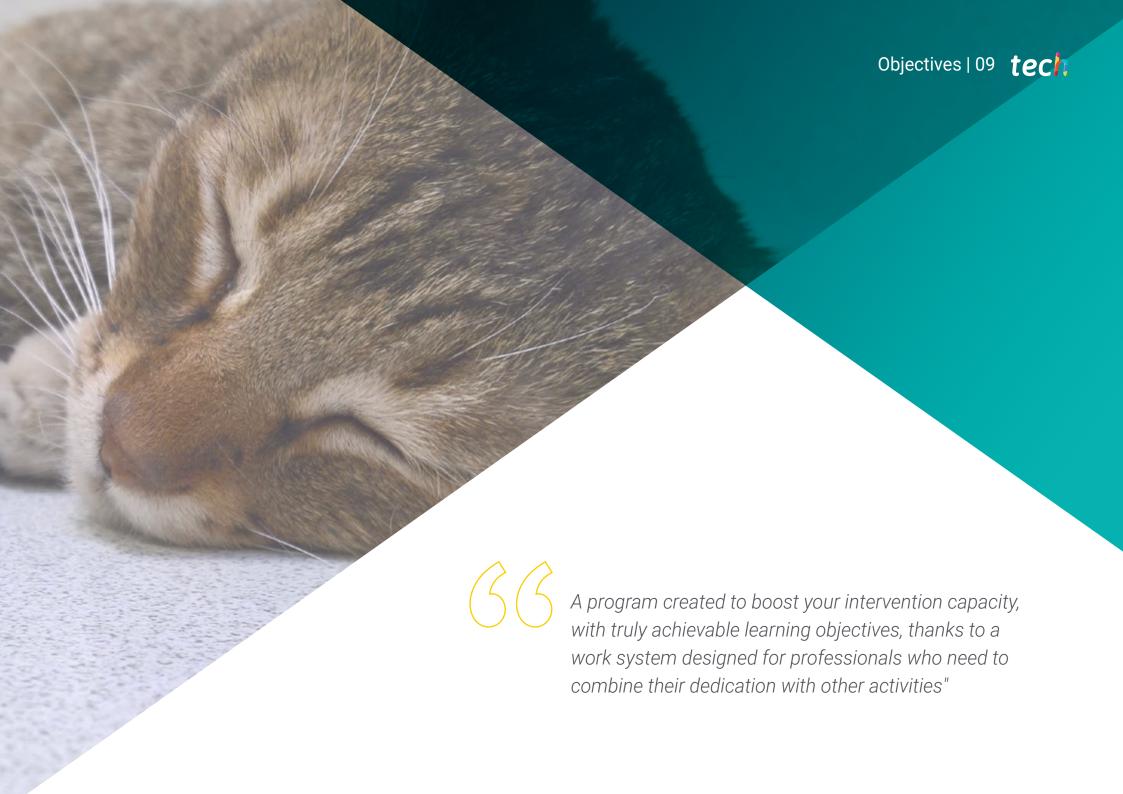
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced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

A 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.







## tech 10 | Objectives



## **General Objectives**

- Examine the clinical picture suggestive of bacterial infection in cats
- Determine the presence of fungal infection in the feline species
- Establish diagnostic tests according to clinical suspicion
- Establish the antimicrobial therapy of choice depending on each pathology



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





## Objectives | 11 tech



## **Specific Objectives**

- 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





## tech 14 | Course Management

#### Management



#### Ms. Pérez-Aranda Redondo, María

- Head of the Dermatology Service at Symbiosis Center of Veterinary Specialties. Veterinarian at North Aljarafe 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)

#### Mr. 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)



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



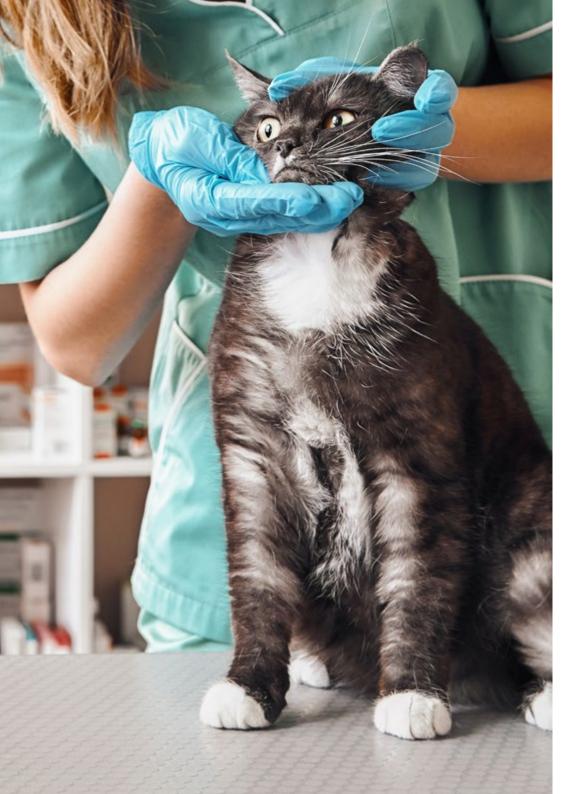


## tech 18 | Structure and Content

#### Module 1. Infectious Diseases in the Feline Species (II). Bacteria and Fungi

- 1.1. Bacteria Affecting the Respiratory and Ocular Systems (I)
  - 1.1.1. Respiratory Mycoplasmas
  - 1.1.2. Chlamydiosis
  - 1.1.3. Bordetella Bronchiseptica
- 1.2 Bacteria Affecting the Respiratory and Ocular System (II)
  - 1.2.1. Pasteurella
  - 1.2.2. Pseudomonas
  - 1.2.3. Klebsiella Pneumoniae
  - 1.2.4. Escherichia Coli
  - 1.2.5. Actinomycosis and Nocardiosis
- 1.3. Bacteria Affecting the Digestive System
  - 1.3.1. Bacteria Affecting the Gastrointestinal Tract
    - 1.3.1.1. Campylobacteriosis
    - 1.3.1.2. Salmonellosis
    - 1.3.1.3. Chlostridiosis
    - 1.3.1.4. Escherichia coli
    - 1.3.1.5. Helicobacter
  - 1.3.2. Bacterial Cholangitis and Bacterial Cholangiohepatitis
- 1.4. Cutaneous Bacteria
  - 1.4.1. Streptococcus
  - 1.4.2. Staphylococcus
  - 1.4.3. Abscess-Forming Bacteria
    - 1.4.3.1. Nocardiosis
    - 1.4.3.2. Actinomycosis
    - 1.4.3.3. Rhodococcus
  - 1.4.4. Bacteria Involved in Bite Wounds
- 1.5. Bacteria Affecting the Nervous System
  - 1.5.1. Clostridium Tetani
  - 1.5.2. Clostridium botulinum
  - 1.5.3. Escherichia coli





## Structure and Content | 19 tech

- 1.6. Bacteria Affecting Other Organs. Nephrourinary, Cardiovascular and Systemic System
  - 1.6.1. Gram Positive Bacteria
  - 1.6.2. Gram Negative Bacteria
  - 1.6.3. Bartonellosis
  - 1.6.4. Leptospirosis
  - 1.6.5. Management of the Feline Patient with Sepsis
- 1.7. Hemotropic Mycoplasma
  - 1.7.1. Etiopathogenesis
  - 1.7.2. Epidemiology
  - 1.7.3. Clinical Signs and Diagnosis
  - 1.7.4. Treatment
- 1.8. Mycobacteriosis
  - 1.8.1. Types of Infections
    - 1.8.1.1. Tuberculosis
    - 1.8.1.2. Mycobacterium Avium complex
    - 1.8.1.3. Feline Leprosy
  - 1.8.2. Diagnosis of Mycobacterial Infections
  - 1.8.3. Treatment of Mycobacterial Infections
- 1.9. Cutaneous Mycoses
  - 1.9.1. Dermatophytosis
  - 1.9.2. Malassezia Dermatitis
- 1.10. Systemic and Respiratory Mycoses
  - 1.10.1. Cryptococcosis
  - 1.10.2. Blastomycosis
  - 1.10.3. Aspergillosis and Penicilliosis
  - 1.10.4. Histoplasmosis
  - 1.10.5. Candidiasis.
  - 1.10.6. Other Mycosis



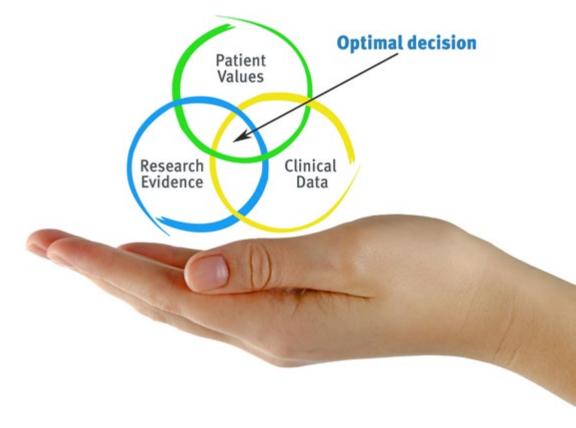


## tech 22 | Methodology

#### 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.



### Methodology | 25 tech

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.

## tech 26 | Methodology

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**

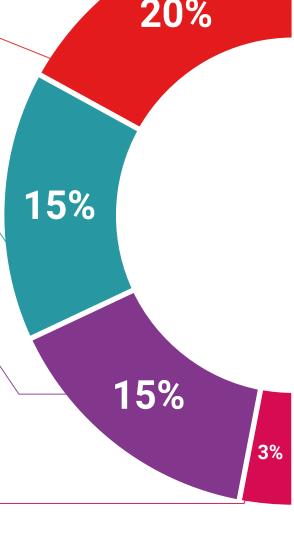
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch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

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



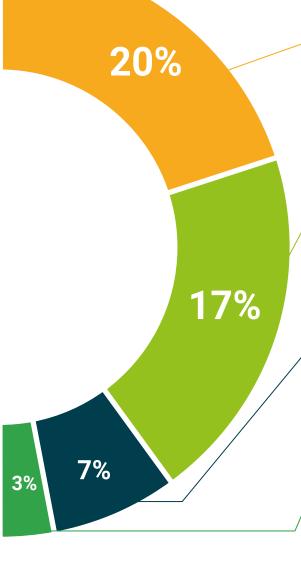
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







## tech 30 | Certificate

This **Postgraduate Certificate Feline Bacterial and Fungal Diseases** 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 **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional from career evaluation committees.

Title: **Postgraduate Certificate in Feline Bacterial and Fungal Diseases**Official N° of Hours: **150 h.** 



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

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



# Postgraduate Certificate Feline Bacterial and Fungal Diseases

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

