

**Postgraduate Certificate**  
Functional Assessment  
and Zookinesic Diagnosis  
in Small Animals





## Postgraduate Certificate Functional Assessment and Zookinesic Diagnosis in Small Animals

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

Website: [www.techtitute.com/in/veterinary-medicine/postgraduate-certificate/functional-assessment-zookinesic-diagnosis-small-animals](http://www.techtitute.com/in/veterinary-medicine/postgraduate-certificate/functional-assessment-zookinesic-diagnosis-small-animals)

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# 01

# Introduction

Functional assessment is a very useful tool with which veterinarians can identify what limitations or asymmetries occur in the fundamental movement patterns and evaluate, by scoring, the quality of the animal's functional movement. Therefore, this program will focus on the basics of biomechanics when evaluating the relationship between the movement performed and the energy expenditure involved, so that they can get the maximum possible performance. The topics that will be covered in this program will provide veterinarians with a solid knowledge base to successfully start their professional activity.





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*This Postgraduate Certificate is a great learning opportunity which will enable you to position yourself as a prestigious veterinarian”*

The functional assessment of the patient undergoing physiotherapy is essential in order to be able to provide them with effective treatment, which is personalized and adjusted to the individual situation of each pet that comes for rehabilitation.

Knowing the basics of biomechanics will allow veterinarians to evaluate the relationship between the executed movement and the energy expenditure involved, so that they can obtain the maximum possible performance.

Therefore, during the program, the biomechanical principles will be clarified, as well as how to correctly carry out a functional assessment. All this will be essential when administering a physiotherapy and rehabilitation plan which has been adapted to suit each small animal.

This complete compendium of contents will be condensed into a 100% online training course, full of multimedia and quality didactic material, and specially designed to lead the veterinarian to success in their daily practice.

This **Postgraduate Certificate in Functional Assessment and Zookinesic Diagnosis in Small Animals** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- ♦ The development of case studies presented by experts in Functional Assessment and Zookinesic Diagnosis in Small Animals
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ New developments in Functional Assessment and Zookinesic Diagnosis in Small Animals
- ♦ Practical exercises where self assessment can be used to improve learning
- ♦ Special focus on innovative methodologies in Functional Assessment and Zookinesic Diagnosis in Small Animals
- ♦ 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



*You will learn from real case studies that will teach you how to achieve the best results in your daily practice”*

“

*A top quality program, especially oriented towards veterinarians who want to learn everything they need to conduct functional and diagnostic assessments in an optimal way”*

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

The multimedia content, developed using the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic program. For this purpose, the professional will be assisted by an innovative interactive video system developed by recognized and experienced experts in Functional Assessment and Zookinesic Diagnosis in Small Animals with great experience.

*You will deal with the functional assessment of small animals from a global perspective which will help you diagnostically assess pets.*

*A quality Postgraduate Certificate, full of practical case studies specially designed to lead the veterinarian to success in their profession.*



# 02 Objectives

This TECH Postgraduate Certificate was created with the fundamental objective of providing veterinary professionals with the necessary skills to perform optimal functional assessments, with in-depth knowledge of all the aspects involved which will enable them to design rehabilitation plans tailored to the needs of each animal. The knowledge that will be addressed throughout the course will be hugely beneficial to professionals when entering a job market that is increasingly demanding specialist veterinarians with expertise in this area.







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*What is TECH's objective? To help professionals to achieve success in their careers”*



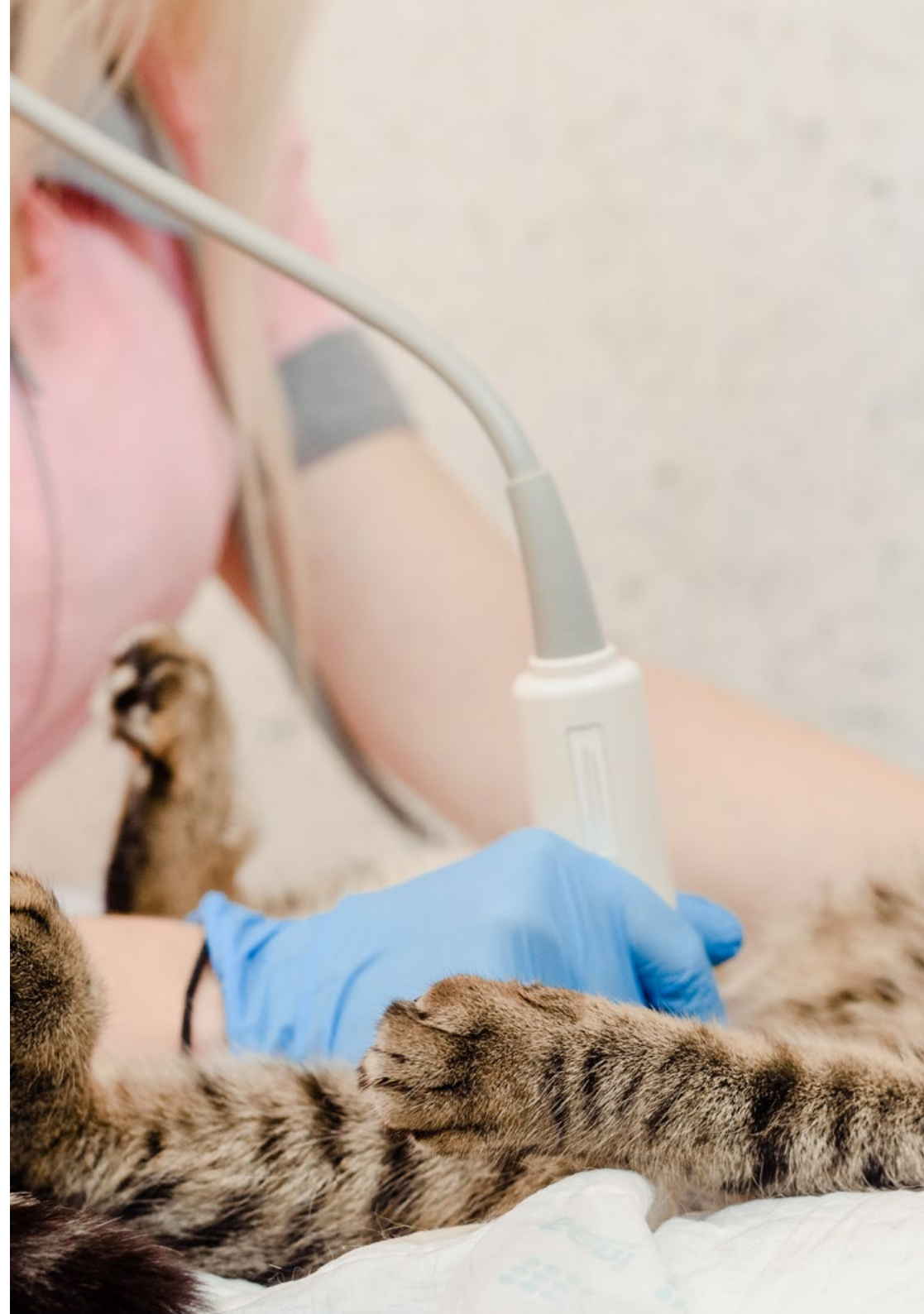
## General objectives

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- Evaluate the patient globally
- Determine the basis for a good functional assessment
- Examine static body position and gait assessment
- Identify pain points or behavior, In this way, as well as compensatory body positions

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*Thanks to this Postgraduate Certificate that TECH offers you, you will be able to position yourself as a prestigious veterinarian”*





## Specific objectives

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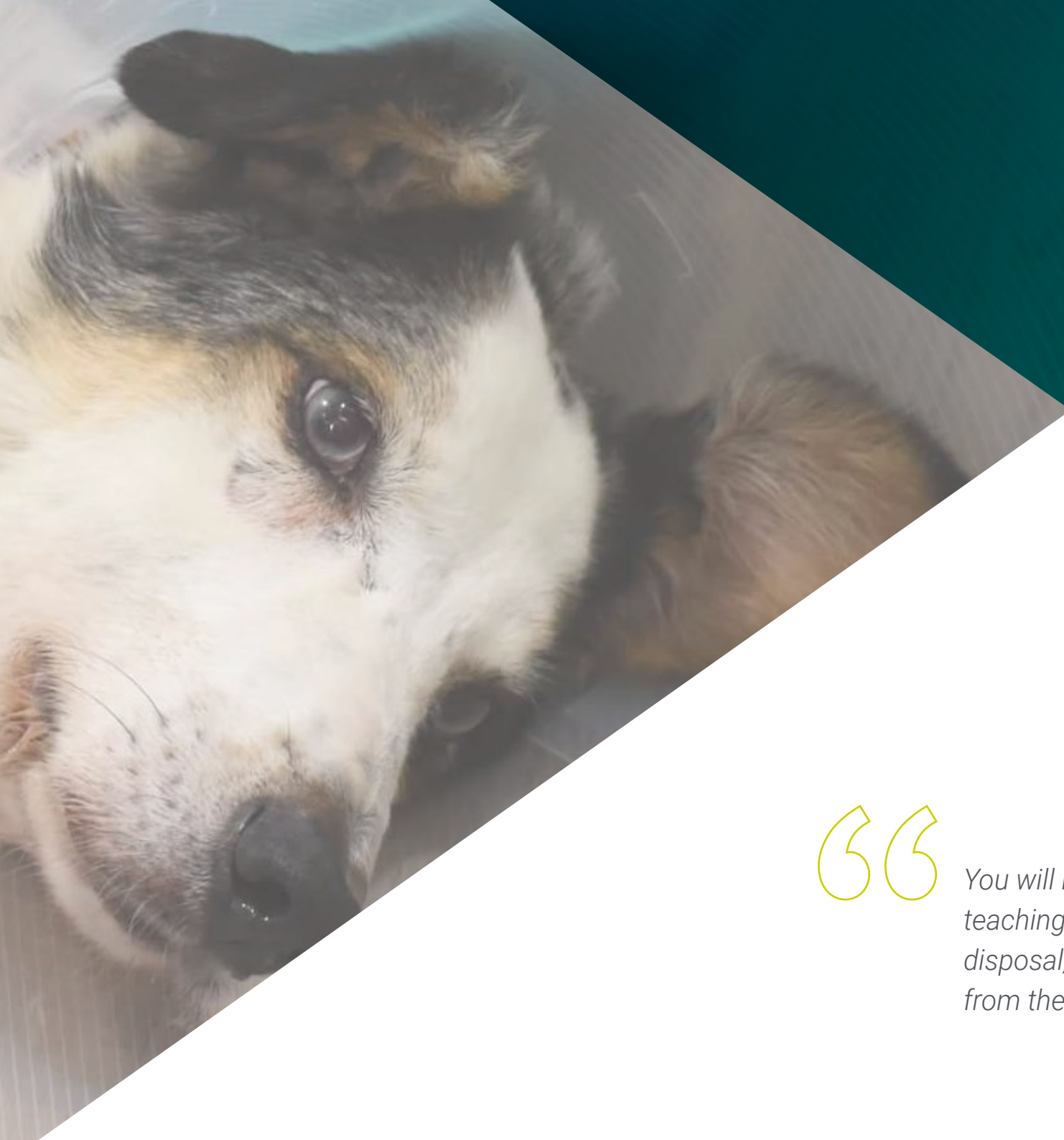
- ◆ Develop the appropriate guidelines and discipline to perform a complete assessment of our patient's
- ◆ Examine the patient as a whole, taking into account the locomotor system and associated structures
- ◆ Define gait characteristics and identify gait abnormalities
- ◆ Assess and identify injuries that may be affecting the forelimb and hind limb
- ◆ Examine the spine and identify tender points and/or lesions present, as well as neurological deficits associated with these alterations
- ◆ Establish the bases of Biomechanics and the elements used for its study
- ◆ Analyze the biomechanics of a patient, theoretically, by means of a system of levers

# 03

## Course Management

A key factor which differentiates TECH's training courses from the competition is its teaching staff. TECH University makes an effort and a capital investment in order to have the best professionals in the sector, backed by the number of clinical case studies they have reviewed, their publications and years of experience. This ensures that veterinarians will understand and know how the functional assessment of small animals works from a multidisciplinary approach, and understand better the conditions for which these interventions have a higher rate of success.





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*You will have the most competent teaching staff in their field at your disposal, ensuring that you learn from the best”*

## Management



### **Ms. Ceres Vega-Leal, Carmen**

- Veterinarian in the Physiotherapy and Rehabilitation Service at Clínica Veterinaria A Raposeira, Vigo (Pontevedra)
- Veterinarian in Tierklinik Scherzingen, Freiburg (Germany)
- Degree in Veterinary Medicine from the Faculty of Veterinary Medicine of León in 2008
- Master's Degree in Physiotherapy and Rehabilitation of Small Animals, Complutense University of Madrid
- Master's Degree in Veterinary Physiotherapy and Rehabilitation for Dogs and Cats, Complutense University of Madrid
- Postgraduate Diploma in Bases of Physiotherapy and Animal Rehabilitation, Complutense University of Madrid 2014

## Professors

### Ms. Picón Costa, Marta

- ♦ Outpatient Rehabilitation and Physiotherapy Service in Seville and Cadiz areas
- ♦ Veterinarian by the Faculty of Veterinary Medicine of Alfonso X the Wise
- ♦ Postgraduate Diploma in Physiotherapy and Animal Rehabilitation, Complutense University of Madrid

### Ms. Pascual Veganzones, María

- ♦ Head veterinarian at the Narub Rehabilitation and Hydrotherapy Center
- ♦ Manager and Coordinator of the Rehabilitation and Physiotherapy service at home, Animal Nutrition in Vetterapia Animal
- ♦ Head of the veterinary clinic at Don Pelanas.Veterinary Center Animal Rehabilitation and Physiotherapy Service
- ♦ Graduate in Veterinary Medicine from the University of Leon
- ♦ Postgraduate course in Rehabilitation and Veterinary Physiotherapy in Small Animals, FORVET school

### Ms. Laliena Aznar, Julia

- ♦ Head of the Rehabilitation Service, Veterinary Hospital Anicura Valencia Sur Valencia
- ♦ I-VET academy teacher in Rehabilitation classes of the Veterinary Technical Assistant postgraduate course
- ♦ Degree in Veterinary from the University of Zaragoza
- ♦ Master's Degree in Small Animal Clinic I and II
- ♦ Postgraduate Certificate in Small Animal Veterinary Rehabilitation
- ♦ Postgraduate Certificate in Clinical Diagnosis in the Canine and Feline Patient

### Ms. Hernández Jurado, Lidia

- ♦ Co-owner and head of the Animal Physical Rehabilitation Service of the Amodiño Veterinary Clinic in Lugo
- ♦ Graduate in Veterinary Medicine from the University of Santiago de Compostela
- ♦ Degree in Biology from the University of Santiago de Compostela
- ♦ Specialization Postgraduate Certificate in Small Animal Rehabilitation

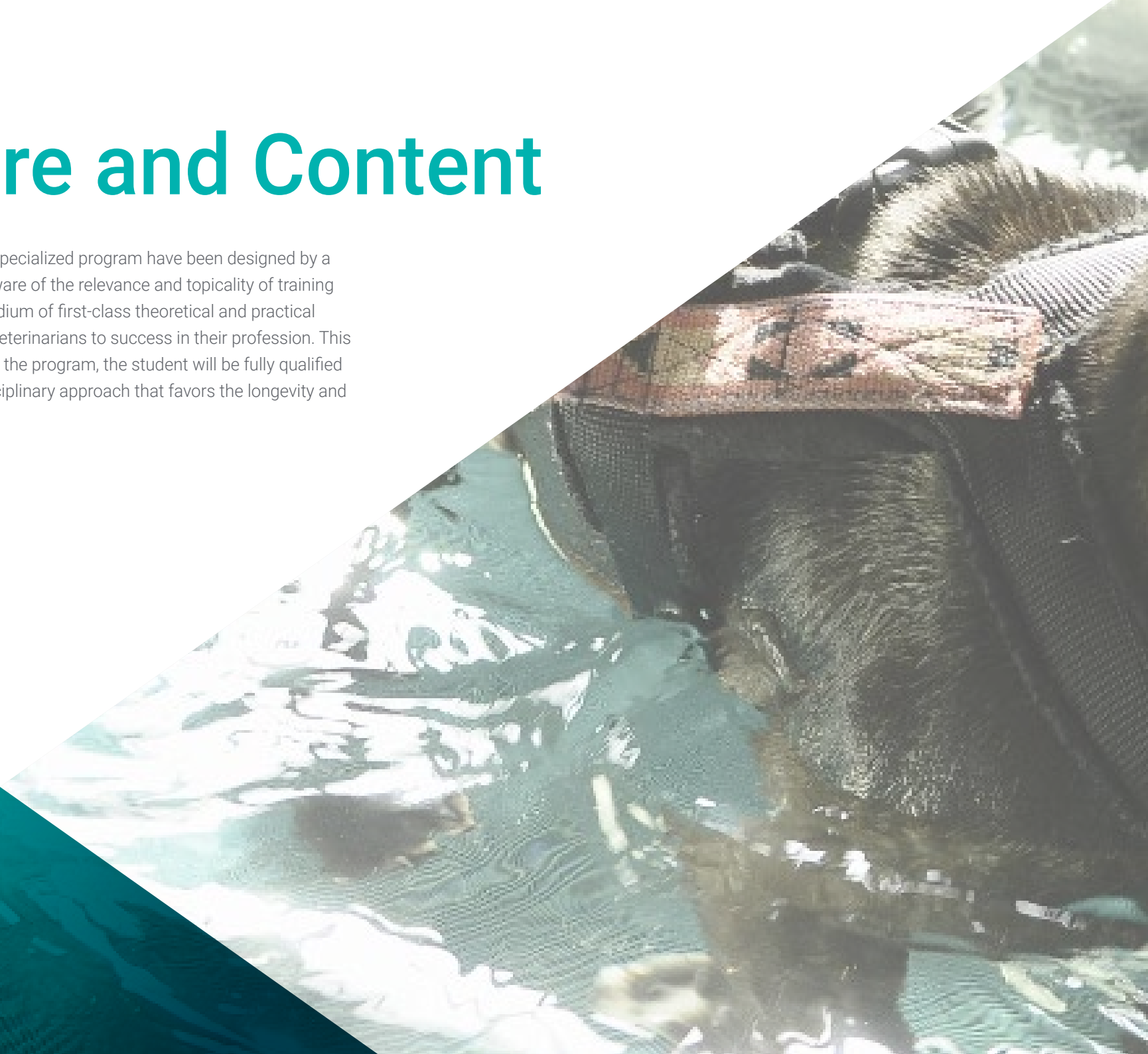
### Ms. Rodríguez-Moya Rodríguez, Paula

- ♦ Veterinarian at the Rehabcan Animal Rehabilitation and Physiotherapy Center. Traditional Chinese veterinary medicine service
- ♦ Graduate in Veterinary Medicine, Catholic University of Valencia
- ♦ Specialty in Traditional Chinese Medicine by Chi Institute. Certified acupuncturist. Certified Food Therapist
- ♦ Postgraduate Degree in Physiotherapy and Rehabilitation of Small Animals by Euroinnova Business School

# 04

## Structure and Content

The structure and contents of this specialized program have been designed by a group of experts in the field who, aware of the relevance and topicality of training in this field, have created a compendium of first-class theoretical and practical content specially designed to lead veterinarians to success in their profession. This will ensure that, upon completion of the program, the student will be fully qualified to work in this area from a multidisciplinary approach that favors the longevity and quality of life of the animal.





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*The utmost scientific rigor and relevance are the strict criteria that TECH will never renounce when creating its content”*

## Module 1. Biomechanics. Functional Assessment

- 1.1. Overall Functional Assessment
  - 1.1.1. Patient Identification
  - 1.1.2. Qualitative and Quantitative Assessment of the Patient
  - 1.1.3. Assessment of Skin, Subcutaneous Tissue and Musculature
    - 1.1.3.1. Muscle Modifications
- 1.2. Assessment of Gait and Static Positioning
  - 1.2.1. Dynamic Physical Examination
    - 1.2.1.1. Characteristics of the Gait
  - 1.2.2. Static Physical Evaluation
- 1.3. Functional Examination of Locomotor System: Forelimb
  - 1.3.1. Shoulder
  - 1.3.2. Elbow
  - 1.3.3. Carpus and Metacarpus
  - 1.3.4. Phalanges
- 1.4. Functional Examination of Locomotor System: Hind Limb
  - 1.4.1. Hip
    - 1.4.1.1. Techniques Used in Hip Examination
  - 1.4.2. Knee
  - 1.4.3. Tarsus and Metatarsus
  - 1.4.4. Brief Mention of the Bioarth Scale
- 1.5. Functional Examination of the Spine
  - 1.5.1. Cervical Spine
  - 1.5.2. Thoracic Spine
  - 1.5.3. Lumbar and Sacral Spine
- 1.6. Biomechanics
  - 1.6.1. Basis of Biomechanics
  - 1.6.2. Dempster Diagram
  - 1.6.3. Free Body Diagram





- 1.7. Motor Gesture and Background Automatism
  - 1.7.1. Motor Gesture
  - 1.7.2. Bottom Automatism
- 1.8. Levers and Pulleys
  - 1.8.1. Newton's Laws
  - 1.8.2. Lever System
  - 1.8.3. Types of Levers
  - 1.8.4. Pulleys
- 1.9. Functional Assessment. Most Frequent Forelimb and Spine Injuries
  - 1.9.1. Forelimb
    - 1.9.1.1. Elbow Dysplasia
  - 1.9.2. Rachis
    - 1.9.2.1. Hernia in Thoracolumbar Region
    - 1.9.2.2. Cauda Equina Syndrome
- 1.10. Functional Assessment of the Most Frequently Occurring Hindlimb Injuries
  - 1.10.1. Hindlimb
    - 1.10.1.1. Hip Dysplasia
    - 1.10.1.2. Patella Dislocation
    - 1.10.1.3. Ruptured Anterior Cruciate Ligament of the Knee



*Welcome to the most complete  
and up to date educational  
program on the market"*

# 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.





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

## At TECH we use the Case Method

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

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



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

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*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.

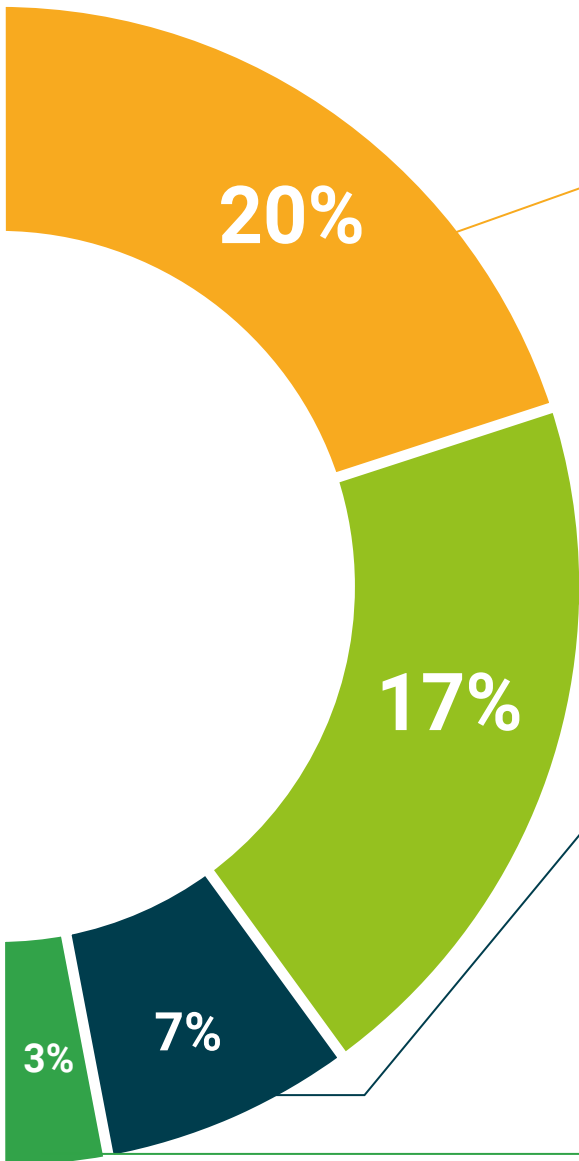
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



### 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

The Postgraduate Certificate in Functional Assessment and Zookinesic Diagnosis in Small Animals guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.





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

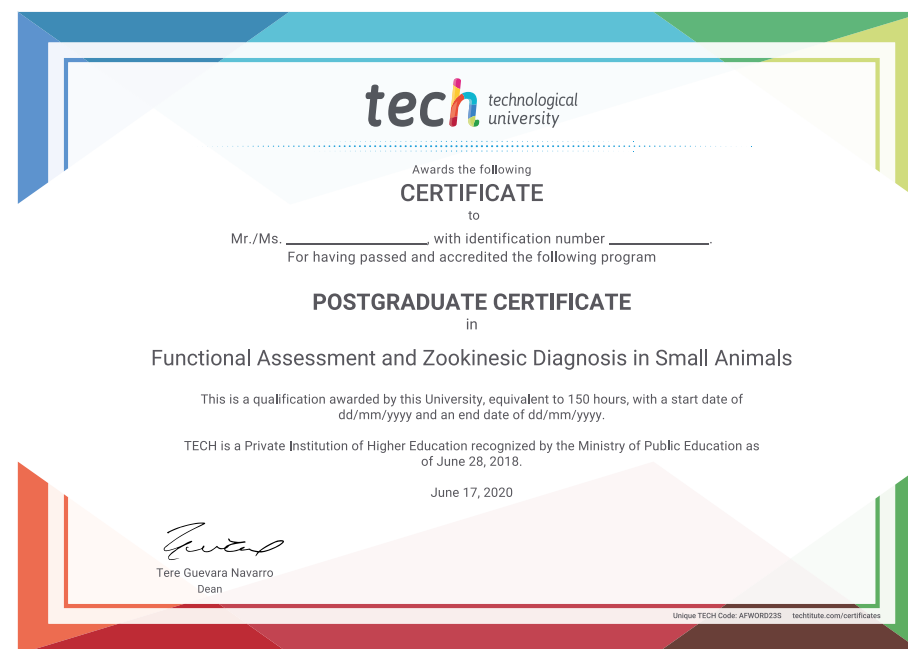
This **Postgraduate Certificate in Functional Assessment and Zookinesic Diagnosis in Small Animals** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **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 career evaluation committees.

Title: **Postgraduate Certificate in Functional Assessment and Zookinesic Diagnosis in Small Animals**

Official N° of hours: **150 h.**



\*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.

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



**Postgraduate Certificate**  
Functional Assessment  
and Zookinesic Diagnosis  
in Small Animals

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **150 h.**

# Postgraduate Certificate Functional Assessment and Zookinesic Diagnosis in Small Animals

