

# Postgraduate Certificate Sport Horse Rehabilitation





## Postgraduate Certificate Sport Horse Rehabilitation

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/sport-horse-rehabilitation](http://www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/sport-horse-rehabilitation)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

# 01

# Introduction

Musculoskeletal injuries are a common health problem in horses. These injuries are more common in sport horses, varying slightly depending on the specific discipline. Injuries cause a drop in performance that could even lead to the animal's withdrawal from the competition. Therefore, intense physical therapy is sometimes required to bring the animal back to its highest level for competition.

Rehabilitation is an effective method of primarily treating musculoskeletal injuries while preventing or reducing compensatory gait alterations that occur in an attempt to alleviate pain in the affected limb.





“

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

Veterinarians face new challenges every day in treating their patients. The Postgraduate Certificate in Sport Horse Rehabilitation comprises a complete and up-to-date educational program including the latest advances in traumatology and orthopedic surgery in ruminants (cattle, sheep), camelids (camels, alpacas and llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules).

The theoretical and practical content has been chosen taking into account its potential practical application in daily clinical practice. Furthermore, the audiovisual material collects scientific and practical information on the essential disciplines for professional practice.

In each topic, practical cases presented by experts in Traumatology and Orthopedic Surgery in Large Animals have been developed, with the objective of the practically applying the knowledge acquired. In addition, students will participate in a self-evaluation process to improve their learning and knowledge during their practical activities.

The teaching team of the Postgraduate Certificate in Sport Horse Rehabilitation has programmed a careful selection of techniques used in the diagnosis and treatment of ruminants (cattle, sheep), camelids (camels, alpacas, llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules), including the description of musculoskeletal surgery and rehabilitation in those species to which they are applied.

The teaching surgeons of this program are Graduates of the European or American College of Veterinary Surgeons and have extensive experience both in the university field and in private practice. In both areas, they are responsible for large animal surgery services in leading veterinary centers and most of them direct residency programs, master's degree programs and research projects.

As a result of the training that the teaching staff of this Postgraduate Certificate undertook in North America and Europe, the techniques have been extensively tested and are internationally recognized.

All of these elements mentioned above make this Postgraduate Certificate a unique specialization program, exclusive and different to all the courses offered in other universities.

This **Postgraduate Certificate in Sport Horse Rehabilitation** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- ◆ Practical cases presented by experts in Diagnosis and Treatment of Lameness in Large Animals: Equidae, Ruminants and Swine
- ◆ 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
- ◆ Latest innovations in Sport Horse Rehabilitation
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Special emphasis on innovative methodologies in Sport Horse Rehabilitation techniques
- ◆ 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 in your veterinary career"*



*This course is the best investment you can make when choosing a refresher programme to update your existing knowledge of Large Animal Veterinary Medicine"*

*This program has the best didactic material, which will enable a contextual study that will facilitate your learning.*

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

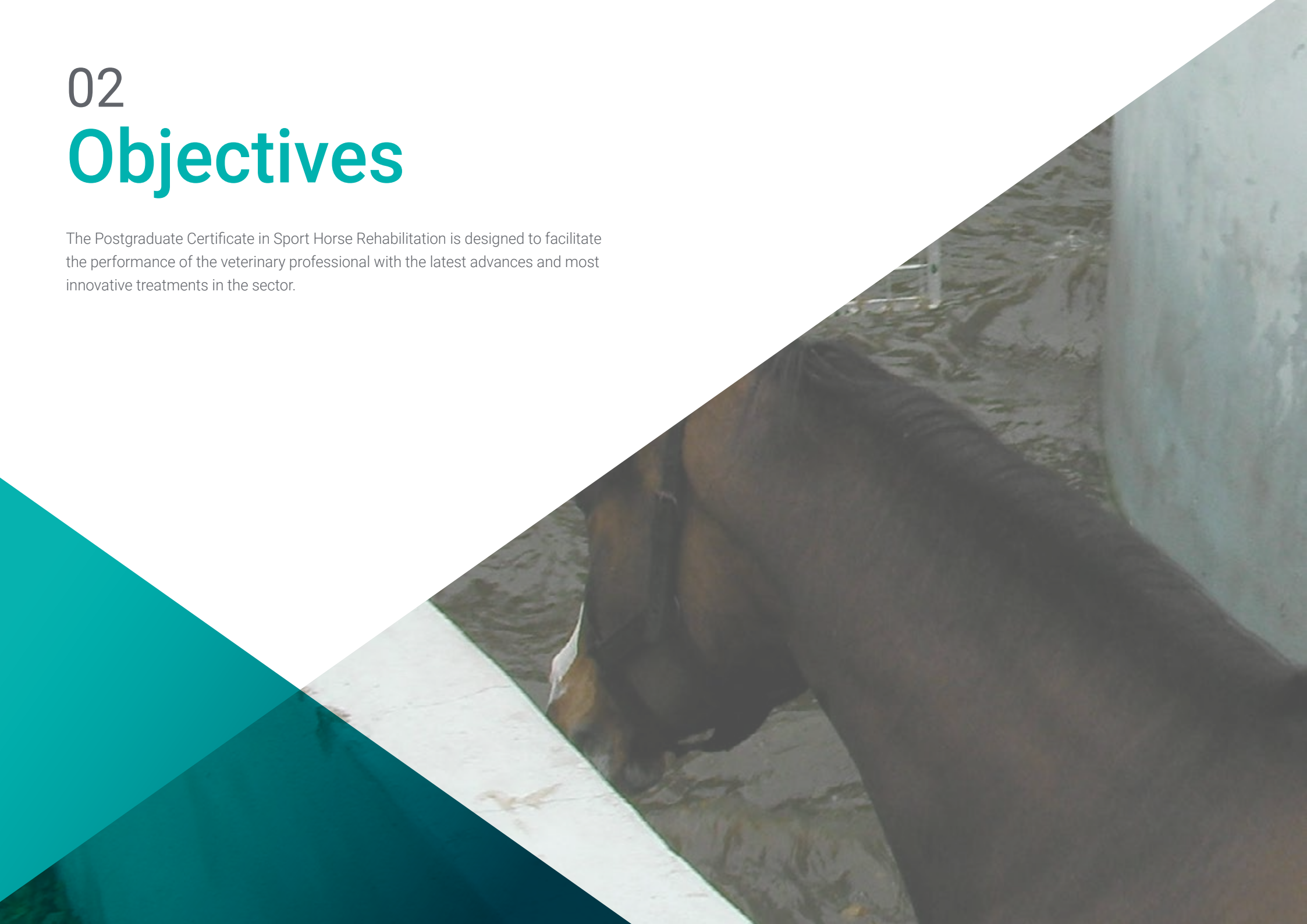
The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the program. For this, the professional will have the help of an innovative interactive video system made by renowned and experienced experts in Sport Horse Rehabilitation.



# 02 Objectives

The Postgraduate Certificate in Sport Horse Rehabilitation is designed to facilitate the performance of the veterinary professional with the latest advances and most innovative treatments in the sector.





“

*It is the best option to learn about the latest advances in Sport Horse Rehabilitation”*



## General Objectives

---

- Examine the importance of musculoskeletal injury rehabilitation in horses
- Establish the basis of the techniques used in rehabilitation
- Analyze the main musculoskeletal rehabilitation techniques in sport horses
- Present rehabilitation plans based on the location of the injury



*Join one of the largest online universities in the world"*





## Specific Objectives

- ♦ Analyze the significance of musculoskeletal injuries and the correct recovery needed
- ♦ Gain knowledge of the basic principles of physiotherapeutic examination in horses
- ♦ Evaluate the physical restrictions and physiological adaptations that occur as a consequence of an injury
- ♦ Examine the different physiotherapeutic techniques available to the equine veterinarian
- ♦ Determine the physical properties of each one of the therapies available in veterinary medicine
- ♦ Create prevention plans for equine athletes
- ♦ Propose rehabilitation plans depending on the musculoskeletal injury

# 03

## Course Management

The program includes in its teaching staff renowned experts in Sport Horse Rehabilitation who invest into this training their years of experience in the field. They are world-renowned doctors from different countries with proven theoretical and practical professional experience.



“

*Our teaching team, experts in Sport Horse Rehabilitation, will help you achieve success in your profession”*

## Management



### Dr. Muñoz Morán, Juan Alberto

- ♦ PhD in Veterinary Science
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Graduate of the European College of Veterinary Surgeons
- ♦ Professor in Large Animal surgery at the Veterinary University of Pretoria, South Africa
- ♦ Head of the Equine Surgery Residency Program at the Veterinary University of Pretoria, South Africa
- ♦ Head of the Large Animal Surgery Department and professor at the Alfonso X el Sabio University, Madrid
- ♦ Surgeon at the Equine Hospital of Aznalcollar, Seville

## Professors

### Dr. Saitua Penas, Aritz

- ♦ Currently studying a PhD in the Department of Animal Medicine and Surgery at the University of Cordoba
- ♦ Degree in Veterinary Medicine from the University of Santiago de Compostela
- ♦ Internship in an Equine Clinic at the Clinical Veterinary Hospital of the University of Córdoba



04

# Structure and Content

The structure of the content has been designed by the best professionals in the field of Sport Horse Rehabilitation, 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 in Sport Horse Rehabilitation contains the most complete and up-to-date scientific program on the market”*

## Module 1. Rehabilitation of Musculoskeletal Injuries in Sport Horses

- 1.1. Significance of Musculoskeletal Injuries in Sport Horses
  - 1.1.1. Introduction
  - 1.1.2. Impact of Musculoskeletal Injuries on the Equine Industry
  - 1.1.3. Most Common Musculoskeletal Injuries According to the Equestrian Discipline
  - 1.1.4. Factors Associated With the Incidence of Injuries in Sport Horses
- 1.2. Physiotherapeutic Assessment of the Horse
  - 1.2.1. Introduction
  - 1.2.2. Clinical Assessment
  - 1.2.3. Body Alignment Assessment
  - 1.2.4. Static Physical Assessment
    - 1.2.4.1. Palpitation
    - 1.2.4.2. Active Mobility Test
    - 1.2.4.3. Passive Mobility Tests
- 1.3. Physiotherapeutic Assessment of the Limbs
  - 1.3.1. Physiotherapeutic Assessment of the Thoracic Limbs
    - 1.3.1.1. Scapula and Scapulohumeral Joint
    - 1.3.1.2. Elbow and Forearm Joint
    - 1.3.1.3. Carpal Joint and Shank
    - 1.3.1.4. Distal Joints: Metacarpal/Tarsal-Phalangeal, Proximal Interphalangeal and Distal Interphalangeal Joints
  - 1.3.2. Physiotherapeutic Assessment of the Pelvic Limbs
    - 1.3.2.1. Coxofemoral and Rump Joints
    - 1.3.2.2. Stifle and Leg Articulation
    - 1.3.2.3. Tarsal Joint
- 1.4. Physiotherapeutic Assessment of the Head of Vertebral Column
  - 1.4.1. Physiotherapeutic Assessment of the Head
    - 1.4.1.1. Head
    - 1.4.1.2. Hyoid Apparatus
    - 1.4.1.3. Temporomandibular Joint
  - 1.4.2. Physiotherapeutic Assessment of the Vertebral Column
    - 1.4.2.1. Cervical Region
    - 1.4.2.2. Thoracic Region
    - 1.4.2.3. Lumbar Region
    - 1.4.2.4. Sacroiliac Joint
- 1.5. Neuromuscular Assessment of the Sport Horse
  - 1.5.1. Introduction
  - 1.5.2. Neurological Evaluation
    - 1.5.2.1. Neurological Examination
    - 1.5.2.2. Evaluation of Cranial Nerves
    - 1.5.2.3. Evaluation of Posture and Gait
    - 1.5.2.4. Assessment of Reflexes and Proprioception
  - 1.5.3. Diagnostic Tests
    - 1.5.3.1. Diagnostic Imaging Techniques
    - 1.5.3.2. Electromyography
    - 1.5.3.3. Cerebrospinal Fluid Analysis
  - 1.5.4. Main Neurologic Pathologies
  - 1.5.5. Main Muscular Pathologies
- 1.6. Manual Therapy Techniques
  - 1.6.1. Introduction
  - 1.6.2. Technical Aspects of Manual Therapy
  - 1.6.3. Considerations of Manual Therapy
  - 1.6.4. Main Techniques of Manual Therapy
  - 1.6.5. Manual Therapy in Limbs and Joints
  - 1.6.6. Manual Therapy in the Spine
- 1.7. Electrotherapy
  - 1.7.1. Introduction
  - 1.7.2. Principles of Electrotherapy
  - 1.7.3. Tissue Electrostimulation
    - 1.7.3.1. Activation of Peripheral Nerves
    - 1.7.3.2. Application of Electric Stimulation



- 1.7.4. Pain Control
  - 1.7.4.1. Mechanism of Action
  - 1.7.4.2. Indications of Its Use in Pain Control
  - 1.7.4.3. Main Applications
- 1.7.5. Muscular Stimulation
  - 1.7.5.1. Mechanism of Action
  - 1.7.5.2. Indications for Its Use
  - 1.7.5.3. Main Applications
- 1.7.6. Laser Therapy
- 1.7.7. Ultrasound
- 1.7.8. Radiofrequency
- 1.8. Hydrotherapy
  - 1.8.1. Introduction
  - 1.8.2. Physical Properties of Water
  - 1.8.3. Physiological Response to Exercise
  - 1.8.4. Types of Hydrotherapy
    - 1.8.4.1. Aquatic Therapy in Flotation
    - 1.8.4.2. Aquatic Therapy in Semi-Flotation
  - 1.8.5. Main applications of Hydrotherapy
- 1.9. Controlled Exercise
  - 1.9.1. Introduction
  - 1.9.2. Stretching
  - 1.9.3. *Core Training*
  - 1.9.4. Cavalletti and Proprioceptive Bracelets
- 1.10. Rehabilitation Plans
  - 1.10.1. Introduction
  - 1.10.2. Tendo-Ligament Injuries
  - 1.10.2. Muscle Injuries
  - 1.10.3. Bone and Cartilage Lesions

# 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 Harvard 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

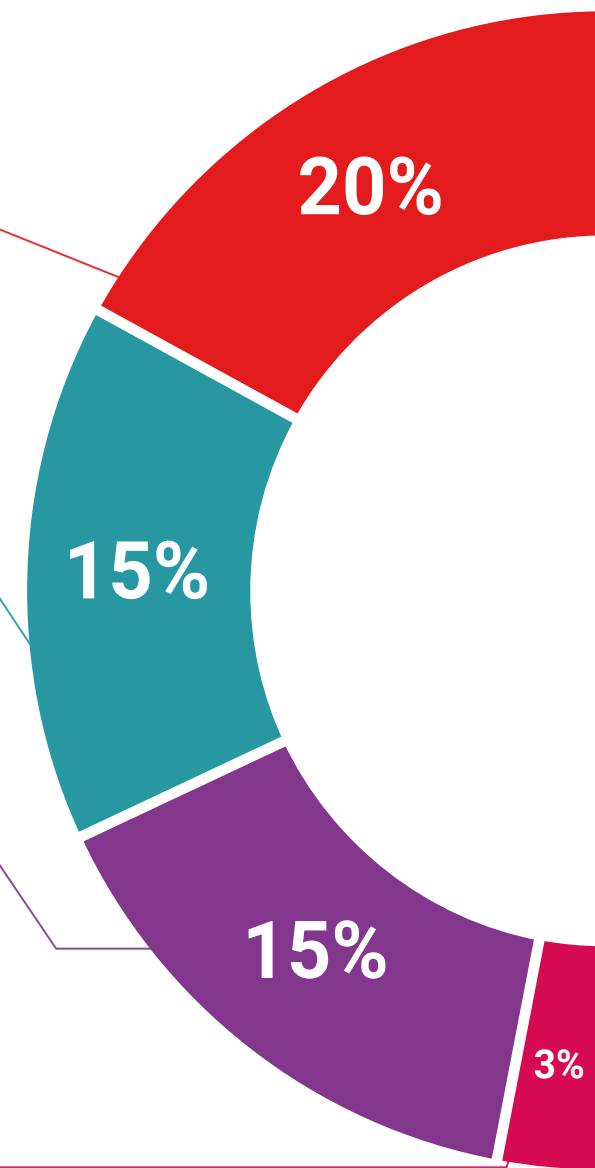
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

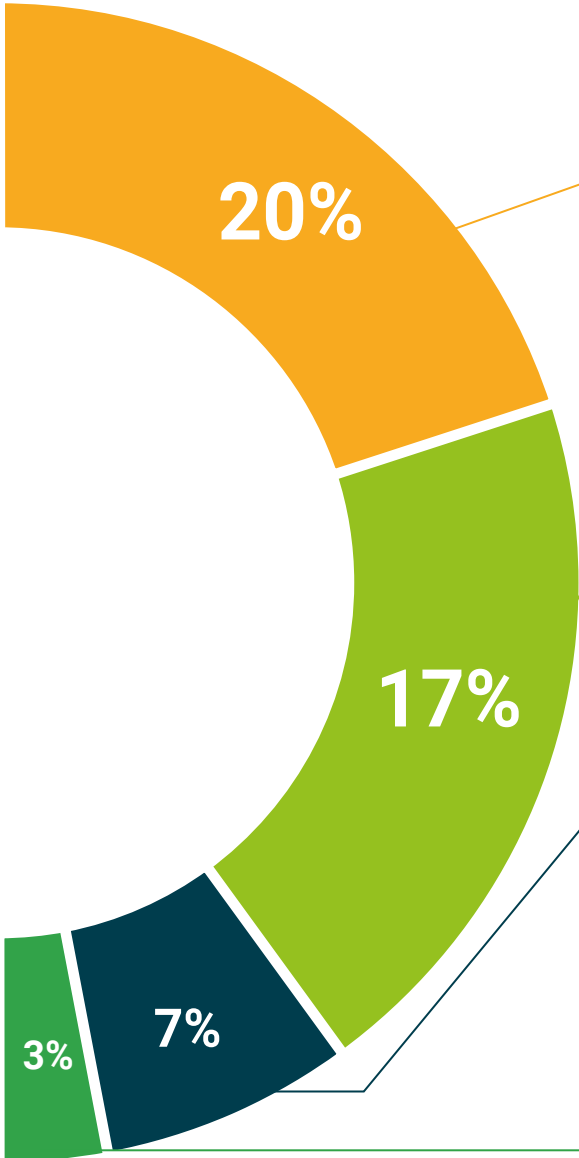
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



### 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 Sport Horse Rehabilitation guarantees, in addition to the most rigorous and up-to-date training, access to a university qualification issued by TECH Global University.



“

*Successfully complete this training and receive your university qualification without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Sport Horse Rehabilitation** 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 Sport Horse Rehabilitation**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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  
development languages  
classroom



## Postgraduate Certificate Sport Horse Rehabilitation

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate Sport Horse Rehabilitation

