Postgraduate Diploma

Horse Functional Anatomy, Biomechanics and Training

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Postgraduate Diploma

Horse Functional Anatomy, Biomechanics and Training

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/physiotherapy/postgraduate-diploma/postgraduate-diploma-horse-functional-anatomy-biomechanics-training

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01

Introduction

The overexertion of horses in some physical exercises can lead to injuries. Therefore, it is essential that physiotherapists who work with these animals have a broad knowledge of their anatomy, biomechanics and the most effective training to avoid putting their health at risk.

Equine Rehabilitation and Physiotherapy is a growing discipline that requires trained professionals to care for horses"

Physiotherapists specialized in the care of equine patients must have in-depth knowledge of the horse's anatomy in order to achieve effective training that minimizes possible damage or side effects to the animals. In this way, they will be able to perform rehabilitation work without any risks, improving their health and physical capacity.

One of the main pillars of this Postgraduate Diploma is the exhaustive and meticulous knowledge of the horse's anatomy, both from the functional point of view as well as its biomechanical behavior. The movement of the horse is developed fundamentally in three gaits: walk, trot and canter. However, as in humans, each equestrian discipline requires specific biomechanics and therefore has specific locomotor requirements. Knowing this dynamic will allow for getting the best physical performance out of the horse.

Likewise, achieving the maximum sporting performance of an athletic horse depends to a large extent on proper training planning. With proper and individualized planning, in addition to achieving the performance appropriate to the genetic potential of the horse, the risk of fatigue, exhaustion and, therefore, musculoskeletal injuries and overtraining will be reduced.

This Postgraduate Diploma provides students with specialized tools and skills to successfully develop their professional activity, working on key competencies such as knowledge of the reality and daily practice of the professional, and developing responsibility in the monitoring and supervision of their work, as well as communication skills within the essential teamwork.

In addition, as it is an online Postgraduate Diploma, the student is not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

This **Postgraduate Diploma in Horse Functional Anatomy, Biomechanics and Training** contains the most complete and up-to-date educational program on the market. The most important features include:

- Practical cases presented by experts in equine physiotherapy and rehabilitation
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- The latest news on horse biomechanics and training
- Practical exercises where self-assessment can be used to improve learning.
- Special emphasis on innovative methodologies in biomechanics and training in horses
- 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 with us in this Postgraduate Diploma in Horse Functional Anatomy, Biomechanics and Training. It's the perfect opportunity to advance in your career"

This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your knowledge in Horse Functional Anatomy, Biomechanics and Training"

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

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

Its teaching staff includes professionals from the field of physiotherapy, who contribute their work experience to this program, as well as renowned specialists from leading 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 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 throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in horse functional anatomy, biomechanics and training.

02

Objectives

This Postgraduate Diploma in Horse Functional Anatomy, Biomechanics and Training is aimed at facilitating the performance of the professional with the latest advances and most innovative treatments in the sector.

Our goal is to provide quality training so that our students become the best in their profession"

General Objectives

- Examine the different methods of objective measurement of the horse's locomotor pattern by means of biomechanical studies
- Analyze the functional anatomy and biomechanics of the main locomotor units of the horse
- Define movement patterns in the horses natural gaits.
- Examine the locomotor demands and specific exercises in the main equestrian sport disciplines
- Plan and time a training program according to the horse's fitness level, competitive objectives and the type of equestrian discipline
- Design a stress test according to the equestrian discipline in which the horse participates, deciding which parameters should be measured and their interpretation
- Establish the diagnostic protocol to be followed in the case of a horse with loss/ reduction/ lack of sporting performance
- Develop a protocol for the treatment and prevention of pathologies associated with physical exercise and training, including overtraining syndrome
- Analyze what motor control is and its importance in locomotion and rehabilitation.
- Evaluate the main tools and exercises of active therapy
- Develop clinical and in-depth reasoning on the use of therapeutic exercises in the horse
- Generate autonomy when developing active re-education programs.

Specific Objectives

Module 1. Applied Anatomy and Biomechanics of Horses

- Characterize the air of walk, trot and canter from the kinetic and kinematic point of view
- Examine the influence of neck position on the biomechanics of the dorsum and pelvis
- Analyze the biomechanical characteristics of the pelvic limb and its relationship with the quality of the gait, trot and canter
- Analyze locomotor modifications associated with speed and training in the horse
- Characterize the biomechanical alterations found in claudication
- Develop variations in movement quality induced by patient age and genetics
- Evaluate the influence of the morphological characteristics of the hoof on the biomechanics of the thoracic limb
- Analyze the different types of shoeing and their effect on the biomechanical characteristics of the horse's hoof
- Establish the interaction of the saddle and rider on the horse's locomotor pattern
- Evaluate the effect of different embouchures and performance systems on the characteristics of the horse's movement

Module 2. Exercise Physiology and Training

- Examine respiratory, cardiovascular and musculoskeletal changes in response to submaximal and maximal, short and long duration, and intermittent exercises
- Understand the importance of histological and biochemical muscle changes with training and their impact on aerobic capacity and the respiratory, cardiovascular and metabolic response to exercise
- Establish how heart rate and blood lactate monitoring is performed, as well as measurement of ventilatory volumes and VO2 oxygen consumption
- Identify the mechanisms of thermoregulation of a horse in sport, the associated pathologies, their consequences and the protocol of action in case of thermoregulatory alterations
- Specify training strategies to develop oxidative potential, strength and anaerobic capacity.
- Present strategies to reduce or delay the onset of fatigue during various types of exercises

Module 3. Therapeutic Exercise and Active Kinesitherapy

- Analyze the neuromuscular physiology involved in motor control
- Identify the consequences of altered motor control
- Define what specific tools we have and how we can include them in a motor control re-education program.
- Examine what elements we should consider when designing an active kinesitherapy program
- Define core training techniques and their application as a therapeutic exercise
- Define proprioceptive facilitation techniques and their application as a therapeutic exercise
- Evaluate the characteristics and biomechanical implications of some of the main exercises from a therapeutic point of view
- Evaluate the effects of active work

03

Course Management

The program includes in its teaching staff reference experts in Equine Physiotherapy and Rehabilitation who pour into this training the experience of their work. They are World-renowned Professionals from different Countries with proven Theoretical and Practical Professional Experience.

Our teaching team is the most complete and successful in the educational panorama"

Management

Dr. Hernández Fernández, Tatiana

- PhD in Veterinary Medicine from the UCM
- Diploma in Physiotherapy at the URJC
- Degree in Veterinary Medicine from the UCM
- Professor at the Complutense University of Madrid of: Expert in Equine Physiotherapy and Rehabilitation, Expert in Bases of Animal Rehabilitation and Physiotherapy, Expert in Physiotherapy and Rehabilitation of Small Animals, Training Diploma in Podiatry and Shoeing
- Resident in the area of Equidae at the Clinical Veterinary Hospital of the UCM
- Practical experience of more than 500 hours in hospitals, sports centers, primary care centers and human physical therapy clinics.
- More than 10 years working as a specialist in rehabilitation and physiotherapy

Professors

Dr. Gómez Lucas, Raquel

- Doctor of Veterinary Medicine.
- Degree in Veterinary Medicine from the Complutense University Madrid
- Graduate of the American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR)
- Professor of the Veterinary Degree at the Alfonso X el Sabio University, teaching Equine Diagnostic Imaging, Internal Medicine and Applied Anatomy
- Professor of the Postgraduate Master's Degree of Equine Medicine and Surgery Internship at the Universidad Alfonso X el Sabio
- Responsible for the Postgraduate Professional Master's Degree in Sports Medicine and Equine Surgery at the Universidad Alfonso X el Sabio
- Head of the Sports Medicine and Diagnostic Imaging Service of the Large Animal Area of the Clinical Veterinary Hospital of the Alfonso X el Sabio University since 2005"

Dr. Gutiérrez Cepeda, Luna

- Doctorate in Veterinary from the Complutense University of Madrid
- Degree in Veterinary Medicine from the Complutense University Madrid
- Master's Degree in Veterinary Science Research from the Complutense University of Madrid
- Master's Degree in Horse Physiotherapy from the Autonomous University of Barcelona
- Diploma in Acupuntura Veterinaria por The International Veterinary Acupuncture Society(IVAS)
- Postgraduate Degree in Physiotherapy of Large Animals (Horses) from the Autonomous University of Barcelona
- Kinesiotaping Instructor for horses by the International Kinesiotaping Society
- Associate Professor, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, Complutense University of Madrid since 2014."

Dr. Muñoz Juzgado, Ana

- PhD in Veterinary Medicine from the University of Córdoba
- Degree in Veterinary Medicine from the University of Córdoba
- Professor in the Department of Animal Medicine and Surgery. Faculty of Veterinary Medicine of the University of Cordoba"

04

Structure and Content

The structure of the content has been designed by the best professionals in the Equine Physiotherapy and Rehabilitation 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.

We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Applied Anatomy and Biomechanics of Horses

1.1. Introduction to the Biomechanics of Horses
- 1.1.1. Kinematic Analysis
- 1.1.2. Kinetic Analysis
- 1.1.3. Other Methods of Analysis

1.2. Biomechanics of Natural Airs
- 1.2.1. Step
- 1.2.2. Trot
- 1.2.3. Gallop

1.3. Thoracic Limb
- 1.3.1. Functional Anatomy
- 1.3.2. Biomechanics of the Proximal Third
- 1.3.3. Biomechanics of the Distal Third and the Digit

1.4. Pelvic Limb
- 1.4.1. Functional Anatomy
- 1.4.2. Reciprocal Apparatus
- 1.4.3. Biomechanical Considerations

1.5. Head, Neck, Dorsum and Pelvis
- 1.5.1. Functional Anatomy of the Head and Neck
- 1.5.2. Functional Anatomy of the Dorsum and Pelvis
- 1.5.3. Position of the Neck and Influence on the Mobility of the Dorsum

1.6. Variations of the Locomotor Pattern I
- 1.6.1. Age
- 1.6.2. Speed
- 1.6.3. Training
- 1.6.4. Genetics

1.7. Variations of the Locomotor Pattern II
- 1.7.1. Thoracic Limb Claudication
- 1.7.2. Pelvic Limb Claudication
- 1.7.3. Compensatory Clauses
- 1.7.4. Modifications Associated With Neck and Dorsal Pathologies

1.8. Variations of the Locomotor Pattern III
- 1.8.1. Trimming and Rebalancing of the Hoof
- 1.8.2. Horseshoeing

1.9. Biomechanical Considerations Associated With Equestrian Disciplines
- 1.9.1. Jump
- 1.9.2. Dressage
- 1.9.3. Races and Speed

1.10. Applied Biomechanics:
- 1.10.1. Rider Influence
- 1.10.2. Effect of the Frame
- 1.10.3. Working Tracks and Floors
- 1.10.4. Auxiliary Aids: Mouthpieces and Yields

Module 2. Exercise Physiology and Training

2.1. Systemic Adaptations to Physical Exercises of Different Intensity and Duration
- 2.1.1. Introduction to Exercise Physiology and Comparative Exercise Physiology: What Makes the Horse the Ultimate Athlete and What Consequences for the Horse?
- 2.1.2. Respiratory Adaptations to Exercise
  - 2.1.2.1. Airway Mechanics
  - 2.1.2.2. Physiological Adjustments During Exercise
- 2.1.3. Cardiovascular Adaptations to Exercise
  - 2.1.3.1. Importance of the Cardiovascular System in Aerobic Capacity
  - 2.1.3.1. Interpretation of Heart Rate in Exercises of Different Intensity
- 2.1.4. Metabolic Response to Exercise
- 2.1.5. Thermoregulation During and After Exercise

2.2. Systemic Adaptations to Training
- 2.2.1. Response of Respiratory Function to Training
- 2.2.2. Cardiovascular Changes Associated with Training and their Consequences
- 2.2.3. Metabolic Responses to Training and Associated Mechanisms. Intervention of Muscle Modifications Associated with Training
- 2.2.4. Adaptive Response of Thermoregulatory Mechanisms to Training and Implications for the Equine Athlete
- 2.2.5. Adaptations of Musculoskeletal Tissues to Training: Tendons, Ligaments, Bones, Joints

2.3. Design of an Exercise Test or Stress Test to Assess Physical Fitness Level
- 2.3.1. Types of Stress Tests
  - 2.3.1.1. Treadmill and Field Stress Tests
  - 2.3.1.2. Maximum and Submaximal Intensity Tests
- 2.3.2. Variables to Consider in the Design of a Stress Test
- 2.3.3. Characteristics of Stress Tests for Speed, Jumping, Dressage and Endurance Horses

2.4. Physiological Parameters to Be Monitored During and After a Stress Test and Interpretation
- 2.4.1. Respiratory Measures
  - 2.4.1.1. Ventilatory Measurements: Minute Ventilation, Tidal Volume
  - 2.4.1.2. Measurements of Pulmonary Mechanics
  - 2.4.1.3. Arterial Blood Gas Concentration
  - 2.4.1.4. Oxygen Consumption (VO2), Peak Consumption and Peak Consumption
- 2.4.2. Cardiovascular Measures
  - 2.4.2.1. Heart Rate
  - 2.4.2.2. ECG
- 2.4.3. Metabolic Measurements
- 2.4.4. Gait Analysis
- 2.4.5. Calculation and Interpretation of Functionality Indices Derived from Heart Rate and Lactate Response to Stress Testing: V2, V4, HR2, HR4, V150, V200

2.5. Diagnostic Approach to Loss/Lack of Performance Use of Stress Tests for the Diagnosis of Reduced Performance
- 2.5.1. Factors Limiting Sports Performance According to Competition
- 2.5.2. Diagnostic Approach to the Horse with Loss of Performance: Evaluation at Rest
- 2.5.3. Diagnostic Approach to the Horse with Loss of Performance: Evaluation at Exercise
- 2.5.4. Stress Tests for the Diagnosis of Loss of Performance
- 2.5.5. Usefulness of Serial Stress Testing and Calculation of Functional Indices for Early Diagnosis of Performance Loss

2.6. General Basis of Training Training of the Three Essential Capacities: Endurance, Speed and Strength
- 2.6.1. Basic Principles of Sports Training
- 2.6.2. Capacity Training
  - 2.6.2.1. Resistance Training
  - 2.6.2.2. Speed Training
  - 2.6.2.3. Strength Training
- 2.6.3. Periodization of Training. Programming From Data Obtained in a Stress Test

2.7. Specific Training for Dressage, Show Jumping and Eventing
- 2.7.1. Dressage
  - 2.7.1.1. Systemic Adaptations to Exercise during Dressage Testing
  - 2.7.1.2. Stress Tests Specific to the Dressage Horse
  - 2.7.1.3. Training for Dressage Horses
- 2.7.2. Show Jumping
  - 2.7.2.1. Systemic Adaptations to Exercise during Show Jumping Trials
  - 2.7.2.2. Specific Stress Tests for Dressage Horses
  - 2.7.2.3. Training for Show Jumping Horses
- 2.7.3. Complete Horseback Riding Competition
  - 2.7.3.1. Systemic Adaptations to Exercise During a Full Competition
  - 2.7.3.2. Specific Stress Tests for the All-Round Horse
  - 2.7.3.3. Training for All-Round Horses

2.8. Specific Training for Endurance and Speed
- 2.8.1. Resistance and Endurance
  - 2.8.1.1. Systemic Adaptations to Exercise during Endurance Tests of Different Durations
  - 2.8.1.2. Specific Stress Tests for Resistance Horses
  - 2.8.1.3. Training for Resistance Horses
- 2.8.2. Training for Race Horses
  - 2.8.2.1. Systemic Adaptations to Exercise During Speed Testing
  - 2.8.2.2. Specific Stress Tests for Race Horses
  - 2.8.2.3. Training for Race Horses

2.9. Overtraining Syndrome
- 2.9.1. Definition and Types of Overtraining Syndrome
- 2.9.2. Etiology and Pathophysiology
- 2.9.3. Hematological, Endocrine, Muscular and Behavioral Changes Compatible with Overtraining

2.10. Excessive Fatigue or Exhaustion. Diagnosis, Treatment and Prevention. Pathologies Associated with Physical Exercise
- 2.10.1. Definition of Exhaustion vs. Fatigue Pathophysiology of the Exhaustion and Post-Exhaustion Syndrome
- 2.10.2. Pathophysiological Mechanisms Associated With Water-Electrolyte Imbalances and Energy Substrate Depletion
- 2.10.3. Specific Pathologies Within the Exhaustion Syndrome: Exercise-Induced Hyperthermia/Heat Stroke, *Flutter* or Synchronous Diaphragmatic Flutter, Colic, Diarrhea, Laminitis, Metabolic Encephelopathy, Renal Failure
- 2.10.4. Medical Management of the Exhausted Horse
- 2.10.5. Exhaustion Prevention Strategies: Before, During and After Competition

Module 3. Therapeutic Exercise and Active Kinesitherapy

3.1. Physiological Basis of Motor Control I
- 3.1.1. Sensory Physiology
  - 3.1.1.1. What It Is and Why It Is Important. Sensation vs. Perception
  - 3.1.1.2. Interconnection Between the Sensory and Motor System
- 3.1.2. Sensory Afferent Fibers
- 3.1.3. Sensory Receptors
  - 3.1.3.1. Definition, Types and Characteristics
  - 3.1.3.2. Cutaneous Sensory Receptors
  - 3.1.3.3. Muscle Proprioceptors

3.2. Physiological Basis of Motor Control II
- 3.2.1 Afferent Sensory Tracts
  - 3.2.1.1. Dorsal Spine
  - 3.2.1.2. Spinothalamic Tracts
  - 3.2.1.3. Spinocerebellar Tracts
  - 3.2.1.4. Other Sensory Tractsaferent
- 3.2.2. Efferent Motor Tracts
  - 3.2.2.1. Corticospinal Tract
  - 3.2.2.2. Rubrospinal Tract
  - 3.2.2.3. Reticulospinal Tract
  - 3.2.2.4. Vestibulospinal Tract
  - 3.2.2.5. Tectospinal Tract
  - 3.2.2.6. Importance of the Pyramidal and Extrapyramidal System in Animals
- 3.2.3. Neuromotor Control, Proprioception and Dynamic Stability
- 3.2.4. Fascia, Proprioception and Neuromuscular Control

3.3. Motor Control Operation and Alteration
- 3.3.1. Motor Patterns
- 3.3.2. Levels of Motor Control
- 3.3.2. Theories of Motor Control
- 3.3.3. How Motor Control is Altered
- 3.3.4. Disfunctional Patterns
- 3.3.5. Pain and Motor Control
- 3.3.6. Fatigue and Motor Control
- 3.3.7. The Gamma Circuit

3.4. Motor Control. Alteration and Re-Education
- 3.4.1. Consequences of Altered Motor Control
- 3.4.2. Neuromuscular Re-Education
- 3.4.3. Learning Principles and Other Theoretical Considerations in Motor Control Re-Education
- 3.4.4. Assessment and Goals in Motor Control Re-Education
- 3.4.5. Importance of Rider-Horse Communication in the Neuromotor System

3.5. Motor Control. Re-Education II: *Core Training*
- 3.5.1. Basis of Application
- 3.5.2. *Core* Anatomy of the Horse
- 3.5.3. Dynamic Mobilizations
- 3.5.4. Facilitation or Strengthening Exercises
- 3.5.5. Imbalance or Destabilization Exercises

3.6. Motor Control. Re-Education II: Proprioceptive Facilitation Techniques
- 3.6.1. Basis of Application
- 3.6.2. Environmental Stimulation Techniques
- 3.6.3. Use of Proprioceptive or Tactile Stimulators and Wristbands
- 3.6.4. Use of Unstable Surfaces
- 3.6.5. Use of Neuromuscular Taping
- 3.6.6. Use of Resistive Elastic Bands

3.7. Training and Active Rehabilitation Programs I
- 3.7.1. Initial Considerations
- 3.7.2. The Natural Gaits of the Horse: Biomechanical Aspects to be Considered in Re-Education
  - 3.7.2.1. Walk
  - 3.7.2.2. Trot
  - 3.7.2.3. Canter
- 3.7.3. Working With the Neck in a Low and Elongated Position: Biomechanical Aspects to Be Considered in Reeducation
- 3.7.4. Working in Circles: Biomechanical Aspects to Consider in Re-Education

3.8. Training and Active Rehabilitation Programs II
- 3.8.1. The Backward Step: Biomechanical Aspects to Be Considered in Re-Education
  - 3.8.1.1. Initial Considerations
  - 3.8.1.2. Effects From a Biomechanics Perspective
  - 3.8.1.3. Effects From a Neurological Perspective
- 3.8.2. Two-Track Work: Biomechanical Aspects to Be Considered in Re-Education
- 3.8.3. Work With Bars and Cavalettis: Biomechanical Aspects to Be Considered in Re-Education
- 3.8.4. Slope Work: Biomechanical Aspects to Be Considered in Re-Education
- 3.8.5. Footwork and Use of Auxiliary Renderings: Biomechanical Aspects to be Considered in Re-Education

3.9. Training and Active Rehabilitation Programs III
- 3.9.1. Considerations and Objectives in the Design of an Active Rehabilitation Program
- 3.9.2. Considerations of the Effect of Training on Muscle Physiology
- 3.9.3. Consideration of the Effect of Training on the Cardiorespiratory System
- 3.9.4. Considerations of Specific Active Rehabilitation Programs
- 3.9.5. Effect of the Rider on Posture and Movement

3.10. Hydrotherapy
- 3.10.1. Therapeutic Properties of Water
- 3.10.2. Resting and Exercise Hydrotherapy Modalities
- 3.10.3. Physiological Adaptations to Exercise in Water, With Special Emphasis on Locomotor Adaptations
- 3.10.4. Use of Water Exercise in the Rehabilitation of Tendon Ligament Injuries
- 3.10.5. Use of Water Exercise in the Rehabilitation of pathologies of Dorsal Pathologies
- 3.10.6. Use of Water Exercise in the Rehabilitation of Joint Pathologies
- 3.10.7. Precautions and General Considerations When Designing a Water-Based Exercise Protocol in Musculoskeletal Rehabilitation

This training will allow you to advance in your career comfortably"

05

Methodology

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

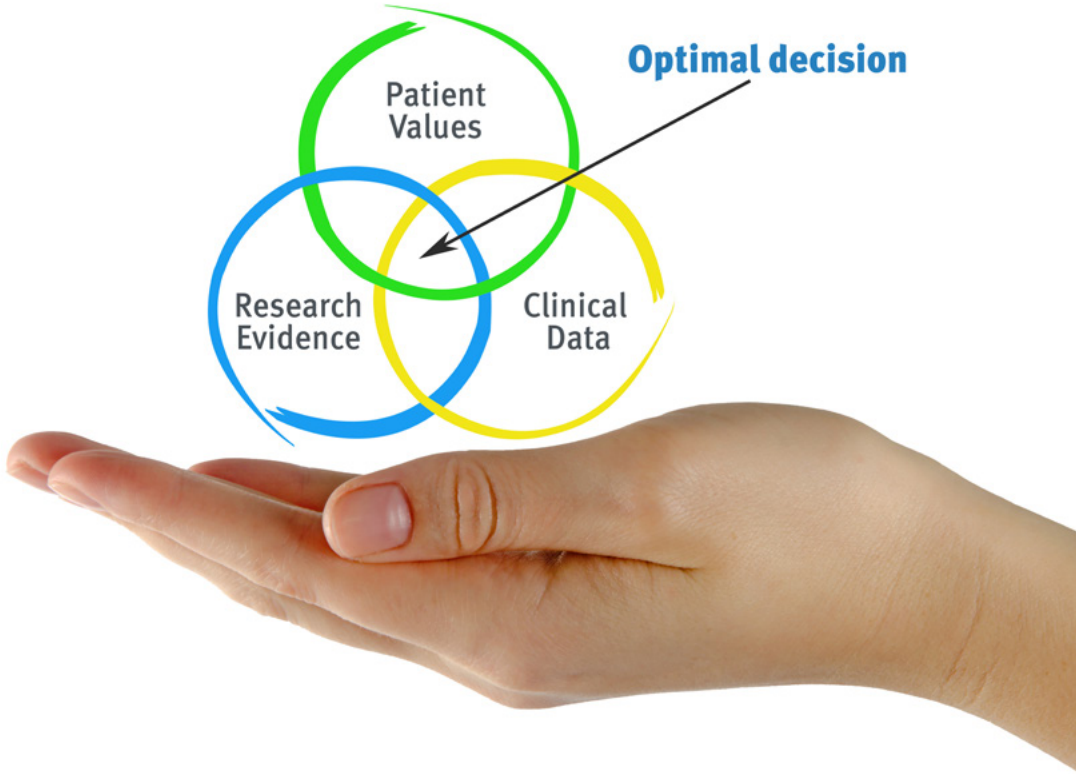
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Physiotherapists/kinesiologists 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, trying to recreate the real conditions of professional physiotherapy 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:

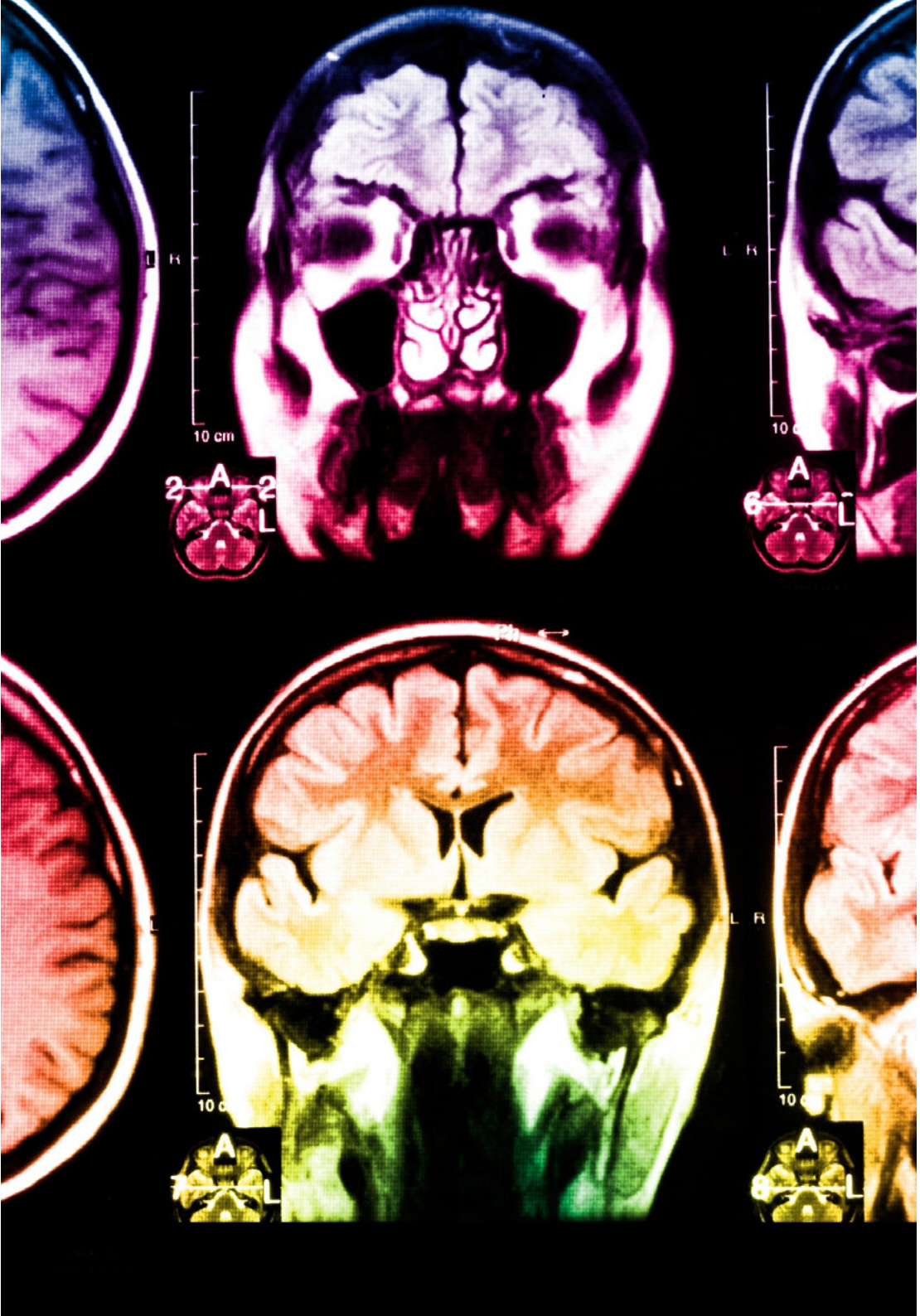
1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more 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.

The physiotherapist/kinesiologist will learn through real cases and by solving 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 we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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 our 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 really 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.

Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.

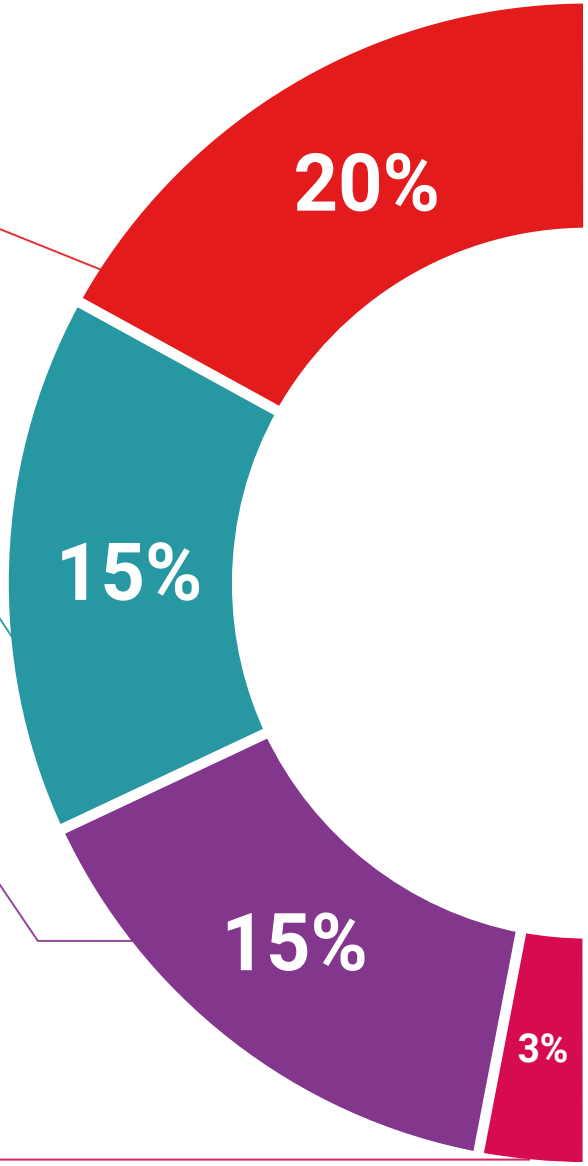
Interactive Summaries

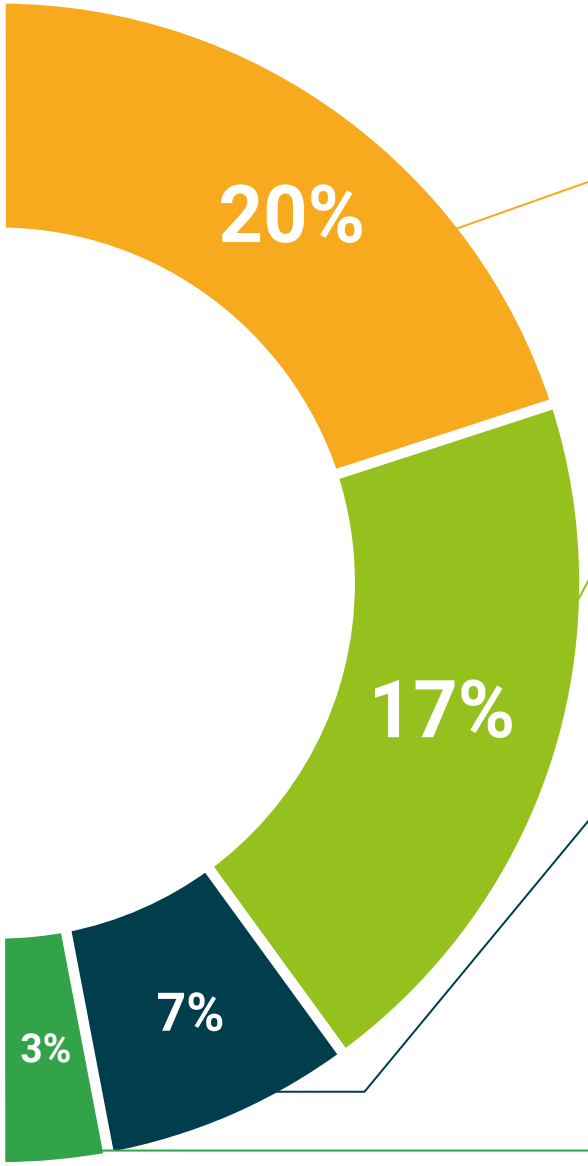
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system 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 on the usefulness of learning by observing experts. The system known as 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 Diploma in Horse Functional Anatomy, Biomechanics and Training guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a **Postgraduate Diploma in Horse Functional Anatomy, Biomechanics and Training** 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** private qualification 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 Diploma in Horse Functional Anatomy, Biomechanics and Training**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Horse Functional Anatomy, Biomechanics and Training

This is a private qualification of 540 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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Postgraduate Diploma

Horse Functional Anatomy, Biomechanics and Training

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma

Horse Functional Anatomy, Biomechanics and Training

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