Postgraduate Diploma
Functional Assessment and Diagnosis for Equine Rehabilitation

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Postgraduate Diploma
Functional Assessment and Diagnosis for Equine Rehabilitation

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

Website: **www.techtitute.com/in/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-functional-assessment-diagnosis-oriented-equine-rehabilition**

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01
Introduction

Advances in research have led to the use of new methodologies in the assessment and diagnosis of pathologies in horses that require specific rehabilitation treatments. Joining this community of learners will allow students to develop the professional skills needed to deal with these animals.

Veterinarians should undertake continuous professional development to enhance their assessments and diagnoses for equine rehabilitation"

The Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation approaches this discipline through the experience of several internationally renowned rehabilitation specialists, as well as overarching scientific analysis of physiotherapy and rehabilitation, including information that cannot be found in any other online or classroom program, delivered by a faculty of the highest level.

The field of Functional Assessment and Diagnosis for Equine Rehabilitation has seen enormous growth in recent years, and represents a clinical speciality widely demanded by owners, riders and professionals in the equestrian field. One of its main pillars 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 with human sports, each equestrian discipline requires specific biomechanics and therefore has specific locomotor requirements. Understanding this facilitates the recognition of appropriate movement patterns or, on the contrary, possible limiters of sports performance. All this has very important implications for the clinical interpretation of numerous pathologies of the musculoskeletal apparatus of the horse.

Thus, this program covers the fundamentals to perform a complete functional examination of the horse, so that a concise list of issues and treatment objectives can be drawn up, which in turn will allow the design of an individualized therapeutic plan.

During the course of this program, neurological, orthopedic or pain assessment methods, essential for the effective veterinary physiotherapist's toolbox, will be demonstrated.

Besides this, there will also be an update on the diagnostic imaging tools currently used in the field of musculoskeletal pathology. Effective treatment and rehabilitation of pathologies requires an accurate diagnosis. For this, a detailed anamnesis, clinical examination, use of the correct diagnostic tools and, finally, the application of a treatment aimed at the horse's sporting recovery must be carried out.

This **Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The exploration of practical cases presented by experts in equine physiotherapy and rehabilitation
- Graphic, schematic, and practical contents which provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in functional assessment and diagnosis for equine rehabilitation
- 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

Do not miss the opportunity to take this Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation with us. It's the perfect opportunity to advance your career"

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 expanding your knowledge in this field.

This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your knowledge in Functional Assessment and Diagnosis for Equine Rehabilitation"

Its teaching staff includes veterinary professionals, who bring their professional experience to this program, as well as recognised 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 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 developed by renowned experts in Functional Assessment and Diagnosis for Equine Rehabilitation, with extensive experience.

Objectives

This Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation is aimed at facilitating the performance of the veterinary professional with the latest advances and newest treatments in the sector.

Our goal is to provide high-quality professional development so that our students become the best in their profession"

General objectives

- Examine the different methods used for objective measurement of the locomotor pattern of horses by means of biomechanical studies
- Analyze the functional anatomy and biomechanics of the main locomotor units in horses
- Define movement patterns in the horse's natural gaits
- Examine the locomotor demands and specific exercises in the main equestrian sports disciplines
- Establish the basis of comprehensive functional assessment approaches in horses
- Define the detailed protocol involved in functional assessments
- Develop tools to establish functional diagnoses
- Identify functional and biomechanical problems
- Establish the basis for obtaining and reading diagnostic images
- Acquire knowledge of the diagnostic technique and its clinical application
- Assess the different pathologies and their clinical significance
- Provide the basis on which to establish adequate physiotherapeutic treatment

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

Specific objectives

Module 1. Applied Anatomy and Biomechanics of Horses

- Characterize the air of walk, trot and canter from a 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 relation to gait, trot and canter quality
- Analyze locomotor modifications associated with speed and training in horses
- Characterize the biomechanical disorders found in claudication
- Explore 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 horse hooves
- 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 horse movement

Module 2. Functional Assessment, Examination and Rehabilitation Planning

- Analyze the establishment and importance of relationships in a multidisciplinary team
- Determine the difference between a functional and an anatomopathological diagnosis, and the importance of holistic approaches
- Objectively compile the comprehensive body of information related to clinical cases
- Develop skills to perform a general static physical examination
- Define the detailed regional static evaluation methodology
- Develop analytical tools to perform complete palpation examinations

- Develop skills to perform dynamic examinations from a functional point of view
- Analyze the special considerations to be taken into account for each sport discipline
- Value the importance of the rider-horse pairing
- Define the methodology of neurological examinations complementary to functional assessments
- Identify the presence of pain in horses
- Determine the correct fit of the saddle
- Detail a list of issues and treatment objectives according to findings
- Build on basic knowledge to plan rehabilitation programs

Module 3. Diagnostic Imaging Oriented to the Diagnosis of Problems Susceptible to Physiotherapy Treatment

- Establish a protocol for diagnostic imaging screening
- Identify which technique is necessary in each case
- Build expertise in each anatomical area
- Establish a diagnosis that helps to better treat the patient
- Determine the various diagnostic techniques and the contributions each makes to the examination
- Examine the normal anatomy of the different areas to be explored in the different imaging modalities
- Recognize individual anatomical variations
- Assess incidental findings and their possible clinical impact
- Establish significant disorders from different diagnostic methods and their interpretation
- Determine an accurate diagnosis to assist in the establishment of an appropriate treatment

03
Course Management

The faculty includes leading experts in Equine Assessment and Functional Diagnosis for Equine Rehabilitation who pour their professional experience into this program. They are world-renowned professionals from different countries with proven theoretical and practical professional experience.

We have the most complete and successful teaching team in the educational panorama"

Management

Dr. Hernández Fernández, Tatiana

- Diploma in Physiotherapy at the URJC
- Degree in Veterinary Medicine from the UCM
- Resident in the field 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. Dreyer, Cristina

- Internship in Sports Medicine and Lameness, at the Lameness Referral Center, N.W.E.P, Northwest Equine Performance, in Oregon, USA
- Postgraduate Diploma in Equine Science by the Veterinary University in Edinburgh
- Own Title of Expert in Bases of Physiotherapy and Animal Rehabilitation by the UCM
- Own Title of Expert in Equine Physiotherapy and Rehabilitation by the UCM
- Quiropraxia Veterinaria por IAVC International Academy of Veterinary Chiropractic
- Acupuntura Veterinaria por IVAS International Veterinary Acupuncture Society

- Applied Kinesiology and Veterinary Holistic by EMVI and the Spanish Association of Kinesiology
- Spanish Certificate in Equine Clinic
- Clinical Manager for two years of the Equine Department at the Large Animal Clinic Los Molinos, Madrid
- More than 10 years as veterinarian of the Sotogrande International Polo Tournament

Dr. García de Brigard, Juan Carlos
- Certified Equine Rehabilitation Clinician. University of Tennessee at Knoxville. Knoxville, TN, USA
- Certificate in Equine Sports Massage Therapy. Equine Sports Massage and Saddle-fitting School. Camden, SC, USA
- Certificate in Animal Chiropractic. American Veterinary Chiropractic Association. Parker University - Dallas, TX, USA
- Certified Kinesio Taping Instructor - Equine. KinesioTaping International Association Albuquerque, NM, USA
- Certified Manual Lymphatic Drainage Therapist. Seminar House Schildbachhof - WIFI-Lower Austria. Baden, Austria
- Certified Equine KinesioTaping Therapist. KinesioTaping International Association Baden, Austria
- HIPPO-Training E.U. Manager and founder. Private practice for high-performance sport horses
- International Equestrian Federation. President of the Veterinary Commission of the 2017 Bolivarian Games and the 2018 Central American and Caribbean Games

Dr. Gómez Lucas, Raquel
- Degree in Veterinary Medicine from the Complutense University Madrid
- Graduate of the American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR)
- 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

Dr. Goyoaga Elizalde, Jaime
- Degree in Veterinary Medicine from the University of Bern, Germany (veterinary clinic "Dr. Cronau") and the United States (University of Georgia)
- Co-director and Professor of the Master's Degree "Equine Medicine and Surgery" Improve International
- Professor in Expert in Bases of Physiotherapy and Animal Rehabilitation. UCM

Dr. Gutiérrez Cepeda, Luna
- Degree in Veterinary Medicine from the Complutense University Madrid
- Official Master's Degree in Veterinary Science Research from the Complutense University of Madrid
- Master's Degree in Physiotherapy at the Autonomous University of Barcelona
- Diploma in Acupuntura Veterinaria por The International Veterinary Acupuncture Society (IVAS)
- Postgraduate in Physiotherapy of Large Animals (Horses) by the Autonomous University of Barcelona
- Kinesiotaping Instructor for horses by the International Kinesiotaping Society

04

Structure and Content

The syllabus has been designed by the best professionals in Equine Assessment and Functional Diagnosis for Equine Rehabilitation, with extensive experience and excellent standing within the profession, backed by a large volume of cases reviewed, studied, and diagnosed, and extensive knowledge of new technologies applied to veterinary care.

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 Gaits
   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. Functional Assessment, Examination and Rehabilitation Planning

2.1.   Introduction to Functional Assessment, Holistic Approach and Clinical History
   2.1.1.   Introduction to Functional Assessment
   2.1.2.   Objectives and Structure of Functional Assessment
   2.1.3.   Holistic Approach and Importance of Teamwork
   2.1.4.   Medical History

2.2.   Static Physical Examination: General and Regional Static Examination
   2.2.1.   Considerations of the Static Physical Evaluation
   2.2.2.   General Static Evaluation
      2.2.2.1. Importance of the General Physical Evaluation
      2.2.2.2. Body Condition Assessment
      2.2.2.3. Conformation Assessment and Poise
   2.2.3.   Regional Static Evaluation
      2.2.3.1. Palpitation
      2.2.3.2. Evaluation of Muscle Mass and Joint Range of Motion
      2.2.3.3. Mobilization and Functional Tests

2.3.   Regional Static Evaluation I
   2.3.1.   Exploration of the Head and the Temporomandibular Joint
      2.3.1.1. Inspection and Palpation and Special Considerations
      2.3.1.2. Mobility Tests
   2.3.2.   Neck Exploration
      2.3.2.1. Inspection-Palpation
      2.3.2.2. Mobility Tests

Module 3. Diagnostic Imaging for the Diagnosis of Issues Treatable with Physiotherapy

Methodology

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

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

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

At TECH we use the Case Method

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

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

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

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

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

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application

2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.

3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.

4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

Relearning Methodology

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

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

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

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

15%

15%

3%

20%

17%

7%

3%

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 Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Diploma issued by TECH Technological University.

Successfully complete this program and receive your university degree without travel or laborious paperwork"
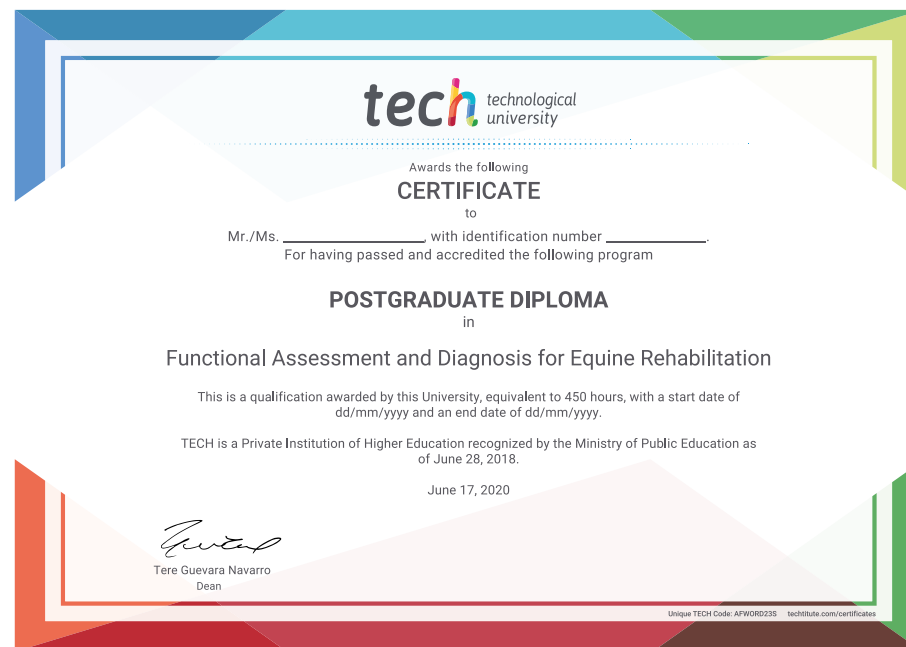
This **Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Diploma in Functional Assessment and Diagnosis for Equine Rehabilitation**

Official Nº of hours: **450 h.**

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Awards the following

CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE DIPLOMA
in

Functional Assessment and Diagnosis for Equine Rehabilitation

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

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