

Postgraduate Diploma

Equine Dermatology, Neurology,
Ophthalmology and Endocrinology



Postgraduate Diploma Equine Dermatology, Neurology, Ophthalmology and Endocrinology

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

Website: www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-equine-dermatology-neurology-ophthalmology-endocrinology

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01

Introduction

The horse's integumentary system is one of the most extensive organs of its body. As a barrier to the organism, it is common for it to suffer trauma and breakage, and it is usual for the horse to suffer injuries of varying extent, mainly in the extremities. Dermatological alterations represent one of the main causes of consultation in equine clinics. Neurological diseases, on the other hand, represent a real challenge for the clinical veterinarian. Knowledge of the basic functioning of all these systems is necessary in order to understand the pathophysiological changes that occur during the disease and therefore correctly approach the diagnosis and treatment of these processes. A high-quality program that will propel the professional's career to the highest levels of excellence.





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You will learn how to diagnose and intervene early in musculoskeletal infections, from professionals with years of experience in the sector”.

This Postgraduate Diploma will review the most important aspects of dermatological, neurological, ophthalmological and endocrinological pathologies. Due to the frequency of these pathologies, it is important to know in depth the different therapeutic options available. In the case of a skin laceration, the objective to be achieved, whenever possible, is the primary healing of the injured tissue.

The prognosis of each case will depend on the structure involved, its location and degree of involvement. The traumas with the worst prognosis are injuries affecting anatomical territories such as joints and tendons. Joint injuries are relatively frequent and have a poor prognosis; tendon lacerations show a lower incidence, with injuries affecting the flexor tendons presenting a serious prognosis.

In order to close the dermatology part, cutaneous neoplasms will be presented, relatively frequent pathologies in equines, which must be treated in a very different way depending on the definitive diagnosis, so a detailed and advanced work methodology will be established for the patient with this type of pathologies, with special emphasis on the most advanced techniques for treatment.

The Postgraduate Diploma will deal with endocrine diseases, which are a challenge for the equine veterinarian. The slow progression of this type of diseases and their symptomatology, often not very evident to the owner, means that, in general, the patient who arrives for diagnosis has become a patient with a chronic disease, and therefore with the development of secondary complications that are difficult to treat.

To this extent, this program aims to be one of the best at the academic level, since it brings together dermatology, neurology, ophthalmology and endocrinology in a single compendium of topics of interest to the professional in process. All in a 100% online format, without schedules or transfers to on-site centers.

This **Postgraduate Diploma in Equine Dermatology, Neurology, Ophthalmology and Endocrinology** contains the most complete and up-to-date scientific program on the market.

Its most notable features are:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practising experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-assessment and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Supplementary documentation databases are permanently available, even after finishing the course



Join the elite, with this highly effective preparatory specialization and open new paths to your professional progress".

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A comprehensive program that will allow you to acquire the most advanced knowledge in all the fields of intervention of the Equine Veterinarian”.

Our teaching staff is made up of professionals from different fields related to this specialty. In this way, we ensure that we provide you with the educational update we are aiming for. A multidisciplinary team of professionals prepared and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at your service the practical knowledge derived from their own experience: one of the differential qualities of this educational program.

This mastery of the subject matter is complemented by the effectiveness of the methodological design. Developed by a multidisciplinary team of *e-Learning* experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your education.

The design of this program is based on Problem-Based Learning: an approach that views learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system, and *learning from an expert*, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

With the experience of working professionals and the analysis of real success stories, in a high-impact educational approach.

With a methodological design based on proven teaching techniques, this innovative course will take you through different teaching approaches to allow you to learn in a dynamic and effective way.



02 Objectives

Our objective is to prepare highly qualified professionals for the work environment. An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is materialized in helping professionals to reach a much higher level of competence and control. A goal that, in just a few months you will be able to achieve, with a high intensity and effective education.





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If your objective is to reorient your skills towards new paths of success and development, this is your Postgraduate Diploma: an educational program that aims for excellence".



General Objectives

- ♦ Identify the different anatomical structures and pathologies of the digestive tract of the horse.
- ♦ Develop and advance in the most frequent procedures to solve oral cavity pathologies.
- ♦ Recognize the symptoms of digestive disorders.
- ♦ Enable the clinician to correctly assess the systemic state of the animal and the consequent severity of the pathology.
- ♦ Establish diagnostic protocols and generate optimized treatments and prognoses.
- ♦ Establish optimal preventive medicine criteria and good management guidelines.
- ♦ Establish an appropriate methodology for the examination of the horse with respiratory or cardiac problems.
- ♦ Identify all clinical signs associated with respiratory or cardiovascular disease in equines.
- ♦ Generate specialized knowledge of respiratory and cardiac auscultation.
- ♦ Establish the specific clinical approach to the horse with a respiratory or cardiovascular disorder.
- ♦ Identify the pathologies of the urinary system of the horse.
- ♦ Establish diagnostic protocols to facilitate the recognition of patients with urinary pathology.
- ♦ Expand the alternatives of possible treatments according to pathological situations.
- ♦ Recognize the medical and surgical genital pathologies of the stallion and the dam mare, assess their extent and provide appropriate treatments for recovery and restoration of proper reproductive function.
- ♦ Develop surgical techniques for the resolution of pathologies of the reproductive system that can be performed in the field.





Specific Objectives

Module 1. Surgical Pathologies of the Skin and Related Structures

- ◆ Specify the different types of wounds that can occur in the equine clinic. Identify and differentiate between acute and chronic pathologies, assess the degree of contamination and/or infection, if any, and recognize damaged adjoining structures, assessing whether they are septic or not.
- ◆ Develop knowledge of the different phases of skin healing.
- ◆ Determine the techniques of tissue management, hemostasis, suturing, reconstruction and skin grafting.
- ◆ Set guidelines for the choice of the different types, materials and patterns of suture and needle and drainage models available to the clinician in the field.
- ◆ Establish the different types and materials of bandages, both for wound treatment and immobilization. Select the appropriate dressing or bandage for each clinical situation.
- ◆ Apply the different therapeutic guidelines and reparation procedures and other first aid techniques for acute and fresh wounds.
- ◆ Apply the different therapeutic guidelines and repair procedures for complicated, chronic and infected wounds, contemplating the possibility of the application of alternative procedures and technologies.
- ◆ Indicate the tests to be performed on a patient with a musculoskeletal injury or infection to determine the significance of the injury.
- ◆ Carry out correct diagnosis and treatment of synovial and bone infections, and perform joint lavage procedures and regional and intraosseous perfusion of antibiotics in the field.
- ◆ Specify the use of the different tenorrhaphy techniques in order to treat damage and lacerations of tendon and/or ligamentous structures.
- ◆ Present the different causes of exuberant granulation and its treatment.
- ◆ Apply the different therapeutic guidelines in burns and abrasions of different types.

Module 2. Medical Pathologies of the Skin Endocrine System

- ◆ Identify the main pathologies affecting the skin.
- ◆ Examine the origin of the problem and establish the prognosis of dermatitis.
- ◆ Recognize the clinical and laboratory signs of the main dermatological diseases.
- ◆ Identify the symptoms of bacterial and viral skin diseases and propose therapeutic options.
- ◆ Determine the symptoms of skin diseases of fungal and parasitic origin and propose therapeutic options.
- ◆ Establish the symptoms of allergic and immune-mediated skin diseases, and propose therapeutic options.
- ◆ Examine the symptoms of other skin diseases as well as their prognosis and treatment options.
- ◆ Identify and develop the clinical presentation, diagnosis and management of the main types of neoplasms affecting horses.
- ◆ Generate advanced knowledge on the pathology, diagnosis and management of sarcoids, squamous cell carcinomas, melanocytic tumors, mastocytomas and lymphomas.
- ◆ Examine recent developments in the therapy of cutaneous neoplasms in horses.
- ◆ Develop advanced knowledge on the pathology, diagnosis and management of equine metabolic syndrome and dysfunction of the intermediate pituitary gland in horses.
- ◆ Identify the processes that occur with alterations in thyroid hormone concentrations.
- ◆ Determine the most common causes of alterations in calcium, phosphorus and magnesium levels in horses.

Module 3. Nervous System and Ophthalmology

- ♦ Identify all clinical signs associated with neurological disease.
- ♦ Define the key points of the neurological assessment.
- ♦ Establish differential diagnoses based on the main neurological pathologies of the horse.
- ♦ Present and analyze the diagnostic tools available for the different processes.
- ♦ Propose specific measures for the management of the neurological patient.
- ♦ Update neurological patient treatments both in the field and at the hospital setting.
- ♦ Define parameters that help us to establish a prognosis for the patient.
- ♦ Delve into the use of diagnostic tools in ophthalmology, such as direct and indirect ophthalmoscopy, fundus assessment and electroretinography.
- ♦ Accurately recognize clinical signs of eye pain in horses.
- ♦ Establish differential diagnoses of ocular clinical signs.
- ♦ Propose a working methodology for patients with corneal ulcers and/or infectious keratitis.
- ♦ Propose a working methodology for the patient with stromal abscess and immune-mediated keratitis.
- ♦ Establish a working methodology for the patient with equine recurrent uveitis and for the patient with cataracts.
- ♦ Propose working methodologies for patients with glaucoma and for horses with ocular neoplasia





“*An opportunity for education and professional growth that will propel you towards greater competitiveness in the labor market”.*

03

Course Management

Within the concept of total quality of our program, we are proud to put at your disposal a Teaching Staff of the highest level, chosen for their proven experience. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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Our teaching team, experts in Equine Dermatology, Neurology, Ophthalmology and Endocrinology, will help you achieve success in your profession."

International Guest Director

As one of the foremost veterinary surgeons in equine care, Dr. Andy Fiske-Jackson is the Deputy Director of the Royal Veterinary College Equine in the United Kingdom. This is one of the leading institutions in both equine patient care and veterinary development, education and innovation. This has allowed him to develop in a privileged environment, even receiving the James Bee Educator Awards for excellence in educational work.

In fact, Dr. Andy Fiske-Jackson is also part of the team of surgeons at the Equine Referral Hospital, focusing his work on orthopedic and soft tissue surgery. As such, his main areas of focus are low performance, back pain, dental and sinus issues, digital flexor tendinopathies and regenerative medicine.

In terms of research, his work leans between diagnostic techniques for digital flexor tendinopathies, clinical uses of objective gait analysis and objective assessment of back pain. His efficiency in this field has led him to actively participate in various international events and conferences, including congresses in Portugal, Czech Republic, Finland, Belgium, Hungary, Switzerland, Austria, Germany, Ireland, Spain and Poland.



Dr. Fiske-Jackson, Andy

- Deputy Director at the Royal Veterinary College Equine. Hertfordshire, United Kingdom
- Associate Professor of Equine Surgery at the Royal Veterinary College
- Equine Surgeon at the Equine Referral Hospital. Hertfordshire, United Kingdom
- Veterinarian at Axe Valley Veterinary
- Veterinarian at Liphook Equine Hospital
- Veterinarian at the Humane Society International. Morocco
- Degree from the University of Liverpool
- Master's Degree in Veterinary Medicine from the Royal Veterinary College

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Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Dr. Varela del Arco, Marta

- Clinical veterinarian specialized in Equine Surgery and Sports Medicine
- Head of Large Animal Unit at the Complutense Clinical Veterinary Hospital of Madrid
- Associate Professor, Department of Animal Medicine and Surgery, Complutense University of Madrid
- Head of Large Animal Unit at the Complutense Clinical Veterinary Hospital of Madrid
- Associate Professor of the Department of Animal Medicine and Surgery, UCM
- Teacher in different graduate and postgraduate courses, university specialization programs and master's degrees.
- Director of Final Year Project in the Veterinary Degree and as a member of the tribunal of different doctoral theses.
- PhD in Veterinary Medicine, Complutense University of Madrid
- Spanish Certificate from Equine Clinic (CertEspCEq)



Dr. De la Cuesta Torrado, María

- Veterinarian with clinical specialty in Equine Internal Medicine
- Associate Professor of the Department of Equine Medicine and Surgery at the Cardenal Herrera CEU University of Valencia
- Doctorate in Advanced Studies from the Complutense University of Madrid
- Master's Degree in Equine Internal Medicine by Alfonso X el Sabio University
- Founder of MC Veterinaria
- Member of the Organizing Committee of the 12th European College of Equine Internal Medicine Congress
- Member of the Board of Directors of Spanish Society of Ozone Therapy
- Member of the Equine Clinicians Commission of the Official College of Veterinarians of Valencia.
- Member of the Spanish Association of Equine Veterinarians (AVEE).
- Member of the scientific committee and coordinator of courses and congresses in the field of ozone therapy, supported by continuing education credits (CEC) granted by the National Health System.

Professors

Dr. Iglesias García, Manuel

- ♦ Clinical veterinarian and surgeon at the University Hospital of Extremadura
- ♦ Director of Final Year Project in the Veterinary Degree at the University of Extremadura
- ♦ Collaboration in teaching interns and students of the Veterinary Degree during the Master's Degree in Equine Surgery at the University of Extremadura
- ♦ Professor of the Master's Degree in Large Animal Internship at the University of Extremadura
- ♦ Doctor in Veterinary Medicine from Alfonso X El Sabio University
- ♦ Master's Degree in Equine Surgery and obtained the Master's Degree in Equine Surgery and obtaining the title of General Practitioner in Equine Surgery by the European School of Veterinary Postgraduate Studies
- ♦ Professional Master's Degree in Equine Surgery at the Veterinary Hospital of Alfonso X el Sabio University
Spanish Certificate in Clinical Equine (CertEspCEq)

Dr. Barba Recreo, Martha

- ♦ Head of the Equine Internal Medicine Service, Clinical Veterinary Hospital, CEU Cardenal Herrera University
- ♦ Outpatient equine clinical veterinarian clinic in Gres-Hippo
- ♦ Assistant Professor, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, CEU Cardenal Herrera University,
- ♦ Professor and specialist veterinary surgeon in the Equine Internal Medicine service and research associate at the University of Glasgow
- ♦ Professor, researcher and clinical veterinarian in the Equine Internal Medicine Service, Faculty of Veterinary Medicine, CEU Cardenal Herrera University
- ♦ Ph.D. in Biomedical Sciences from Auburn University
- ♦ Diplomate by the American College of Large Animal Internal Medicine

- ♦ Rotating internship in Equine Medicine and Surgery at the University of Lyon
- ♦ Residency in Equine Internal Medicine in Alabama

Dr. López San Román, Javier

- ♦ Veterinarian member of the Equine Surgery Service of the Complutense Clinical Veterinary Hospital
- ♦ Professor of the Department of Animal Medicine and Surgery of the Complutense University of Madrid and deputy director of the Department.
- ♦ Assistant Professor at the LRU University School
- ♦ Professor of Veterinary Medicine at national universities (Las Palmas de Gran Canaria, Córdoba and Extremadura) and abroad (University of Trás-os-Montes e Alto Douro, National Veterinary School of Lyon, National University of Litoral in Argentina).
- ♦ Lecturer in different undergraduate and postgraduate courses, university specialization programs and masters, both national and international, and coordinator of different subjects and courses in the Veterinary Degree
- ♦ Reviewer of scientific articles in several journals indexed in the Journal Citation Report
- ♦ Deputy Director of the Department of Animal Medicine and Surgery, UCM
- ♦ PhD in Veterinary from the Complutense University of Madrid
- ♦ Certified by the European College of Equine Veterinary Surgery

Dr. Muñoz Morán, Juan Alberto

- ♦ Head of Equine Surgery at the Sierra de Madrid Veterinary Hospital
- ♦ Editor of the Journal of Equine Veterinary Medicine and Surgery Equinus
- ♦ Equine surgery clinician at the Montreal Veterinary University.
- ♦ Equine surgery clinician at the Veterinary University of Lyon
- ♦ Partner Surgeon at Grand Renaud Veterinary Clinic
- ♦ Surgeon at the Equine Hospital of Aznalcóllar

- Professor and coordinator of several university programs, both theoretical and practical, at the Veterinary University of Pretoria and at the Alfonso X El Sabio University
- Head of the Postgraduate Program in Sports Medicine and Equine Surgery at Alfonso X El Sabio University
- Doctor of Veterinary Science from the Complutense University of Madrid
- Certified by the European College of Veterinary Surgeons
- Diploma in Experimental Animals Category C from the University of Lyon
- Master's Degree in Veterinary Science from the University Alfonso X el Sabio
- Residency in Large Animal Surgery at the Veterinary University of Lyon
- Internship in Equine Surgery at London Equine Hospital
- Internship in Equine Medicine and Surgery at the Veterinary University of Lyon
- Member of the Examination Committee of the European College of Veterinary Surgeons.

Dr. Martín Cuervo, María

- Head of the Internal Medicine Service of the Veterinary Clinic Hospital of the University of Extremadura
- Researcher specialized in Major Species
- Associate Professor of the Department of Animal Medicine and Surgery, Extremadura University
- PhD in Veterinary Medicine by the Extremadura University.
- Degree in Veterinary Medicine from the University of Córdoba.
- Veterinarian Specialist
- First prize in the IV edition of the awards of the Royal Academy of Veterinary Sciences and the Tomas Pascual Sanz Institute
- Pizarro Pious Work Foundation Award of the XLVI Historical Colloquiums of Extremadura
- Member of the European Board of Veterinary Specialization (EBVS), the European College

of Equine Internal Medicine (ECVIM), the Spanish Association of Equine Veterinarians (AVEE) and the Spanish Association of Equine Specialists (AVEE)

Dr. Forés Jackson, Paloma

- Veterinarian specialized in Clinical Equine Medicine and Biopathology
- Specialist in the Department of Animal Pathology II of the Faculty of Veterinary Medicine of the UCM
- Vice-Dean of Students and Professional Orientation of the Faculty of Veterinary Medicine at the Complutense University of Madrid
- Full Professor of the Department of Animal Medicine and Surgery at UCM
- PhD in Veterinary Medicine, Complutense University of Madrid
- Degree in Veterinary Medicine from the Complutense University Madrid
- Stay at the College of Veterinary Medicine, Department of Large Animal Clinicalsciences, Gainesville
- Clinical sciences, University of Gainesville, Florida
- Member of the Equine Medicine Service of the Complutense Veterinary Clinical Hospital

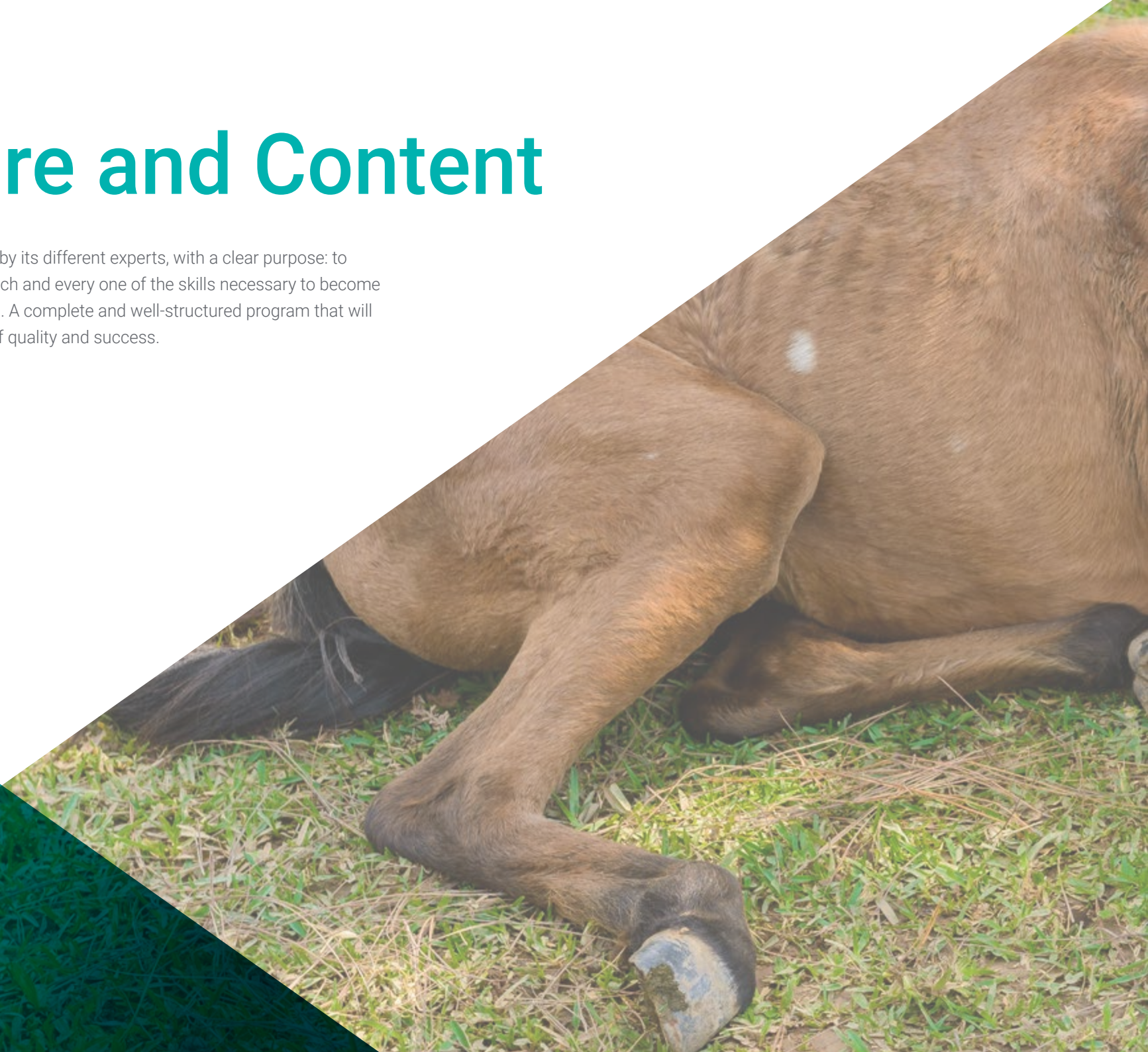


Take the step to get up to date on the latest developments in Equine Dermatology, Neurology, Ophthalmology and Endocrinology"

04

Structure and Content

The contents have been developed by its different experts, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become a Postgraduate Diploma in this field. A complete and well-structured program that will take you to the highest standards of quality and success.





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A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"

Module 1. Surgical Pathologies of the Skin and Related Structures

- 1.1. Examination and Wound Types
 - 1.1.1. Anatomy
 - 1.1.2. Initial Assessment and Emergency Treatment
 - 1.1.3. Wound Classification
 - 1.1.4. Wound Healing Process
 - 1.1.5. Factors Influencing Wound Infection and Wound Healing
 - 1.1.6. Primary and Secondary Intention Wound Healing
- 1.2. Tissue Management, Hemostasis and Suture Techniques
 - 1.2.1. Incision and Tissue Dissection
 - 1.2.2. Hemostasis
 - 1.2.2.1. Mechanical Hemostasis
 - 1.2.2.2. Ligatures
 - 1.2.2.3. Tourniquet
 - 1.2.2.4. Electrocoagulation
 - 1.2.2.5. Chemical Hemostasis
 - 1.2.3. Tissue Management, Irrigation and Suctioning
 - 1.2.4. Suture Materials Used
 - 1.2.4.1. Instruments
 - 1.2.4.2. Suture Material Selection
 - 1.2.4.3. Needles
 - 1.2.3.4. Drainages
 - 1.2.5. Approaches to Wound Suturing
 - 1.2.6. Suture Patterns
- 1.3. Bandages
 - 1.3.1. Materials and Bandage Types
 - 1.3.2. Hull Bandage
 - 1.3.3. Distal Extremity Bandage
 - 1.3.4. Full Limb Bandage
 - 1.3.5. Fiberglass Cast. Application and Peculiarities in Young Animals
- 1.4. Acute Wound Repair
 - 1.4.1. Wound Treatment Medication
 - 1.4.2. Debriding
 - 1.4.3. Emphysema Secondary to Wounds
 - 1.4.4. Negative Pressure Therapy
 - 1.4.5. Topical Treatment Types
- 1.5. Repair and Management of Chronic and/or Infected Wounds
 - 1.5.1. Particularities of Chronic and Infected Wounds
 - 1.5.2. Causes of Chronic Wounds
 - 1.5.3. Management of Severely Contaminated Wounds
 - 1.5.4. Laser Benefits
 - 1.5.5. Larvotherapy
 - 1.5.6. Cutaneous Fistulas Treatment
- 1.6. Hoof Wound Treatment. Regional and Intraosseous Perfusion of Antibiotics
 - 1.6.1. Hoof Wounds
 - 1.6.1.1. Coronary Buckle Wounds
 - 1.6.1.2. Heel Wounds
 - 1.6.1.3. Puncture Wounds on the Palm
 - 1.6.2. Antibiotic Perfusion
 - 1.6.2.1. Regional Perfusion
 - 1.6.2.2. Intraosseous Perfusion
- 1.7. Management and Repair of Synovial Wounds and Joint Lavage
 - 1.7.1. Pathophysiology of Synovial Infection
 - 1.7.2. Epidemiology and Diagnosis of Synovial Wound Infections
 - 1.7.3. Synovial Wound Treatment Joint Lavage
 - 1.7.4. Synovial Wound Prognosis
- 1.8. Tendon Lacerations Management and Repair
 - 1.8.1. Introduction, Anatomy, Anatomical Implications
 - 1.8.2. Primary care, Examination of the Injury, Immobilization
 - 1.8.3. Case Selection: Surgical or Conservative Treatment
 - 1.8.4. Tendon Lacerations Surgical Repair
 - 1.8.5. Rehabilitation and Return to Work Guidelines after Tenorrhaphy



- 1.9. Reconstructive Surgery and Skin Grafting
 - 1.9.1. Principles of Basic and Reconstructive Surgery
 - 1.9.1.1. Skin Tension Lines
 - 1.9.1.2. Incision Orientation and Suture Patterns
 - 1.9.1.3. Tension Release Techniques and Plasties
 - 1.9.2. Closure of Skin Defects of Different Shapes
 - 1.9.3. Skin Grafts
- 1.10. Treatment of Exuberant Granulation Tissue Sarcoid Burns
 - 1.10.1. Causes of the Appearance of Exuberant Granulation Tissue
 - 1.10.2. Treatment of Exuberant Granulation Tissue
 - 1.10.3. Sarcoid Appearance in Wounds
 - 1.10.3.1. Wound Associated Sarcoid Type

Module 2. Medical Pathologies of the Skin. Endocrine System

- 2.1. Clinical Approach and Diagnostic Tests in Equine Dermatology
 - 2.1.1. Medical History
 - 2.1.2. Sampling and Main Diagnostic Methods
 - 2.1.3. Other Specific Diagnostic Techniques
- 2.2. Bacterial and Viral Skin Diseases
 - 2.2.1. Bacterial Diseases
 - 2.2.2. Viral Diseases
- 2.3. Fungal and Parasitic Skin Diseases
 - 2.3.1. Fungal Diseases
 - 2.3.2. Parasitic Diseases
- 2.4. Allergic, Immune-Mediated and Irritative Skin Diseases
 - 2.4.1. Hypersensitivity: Types
 - 2.4.2. Insect Sting Allergy
 - 2.4.3. Vasculitis and other Immune-Mediated Reactions
 - 2.4.4. Other Skin Tumors
- 2.5. Congenital Diseases and Syndromes in Equine Dermatology
 - 2.5.1. Hereditary Equine Regional Dermal Asthenia (HERDA), Epidermolysis Bullosa, and Other Congenital Diseases
 - 2.5.2. Miscellaneous

- 2.6. Cutaneous Neoplasms
 - 2.6.1. Sarcoids
 - 2.6.2. Melanocytic Tumors
 - 2.6.3. Squamous Cell Carcinomas
 - 2.6.4. Mastocytomas
 - 2.6.5. Lymphomas
- 2.7. Alternatives in the Medical Treatment of Neoplasms
 - 2.7.1. Electroporation and Electrochemotherapy
 - 2.7.2. Immunotherapy
 - 2.7.3. Radiotherapy
 - 2.7.4. Dynamic Phototherapy
 - 2.7.5. Cryotherapy
 - 2.7.6. Other Therapies
- 2.8. Endocrine System I
 - 2.8.1. Dysfunction of the Intermediate Portion of the Pituitary Gland
 - 2.8.2. Equine Metabolic Syndrome
 - 2.8.3. Endocrine Pancreas
 - 2.8.4. Adrenal Insufficiency
- 2.9. Endocrine System II
 - 2.9.1. Thyroid Gland
 - 2.9.2. Calcium Disorders
 - 2.9.3. Magnesium Disorders
 - 2.9.4. Phosphorus Disorders
- 2.10. Nutritional Management of the Obese Horse
 - 2.10.1. Body Condition Assessment
 - 2.10.2. Weight Reduction and Caloric Restriction
 - 2.10.3. Pharmacological Intervention
 - 2.10.4. Exercise
 - 2.10.5. Maintenance

Module 3. Nervous System and Ophthalmology

- 3.1. Neuroanatomical Localization of Neurological Injuries in the Horse
 - 3.1.1. Neuroanatomical Peculiarities of the Horse
 - 3.1.2. Medical History
 - 3.1.3. Neurological Examination Protocol
 - 3.1.3.1. Head Assessment Behavior, Consciousness, Position and Cranial Nerves
 - 3.1.3.2. Posture and Motor Function Assessment Gradation of Alterations
 - 3.1.3.3. Neck and Thoracic Limb Evaluation
 - 3.1.3.4. Assessment of the Trunk and Pelvic Limb
 - 3.1.3.5. Assessment of Tail and Anus
 - 3.1.4. Complementary Methods of Diagnostic
- 3.2. Disorders Affecting the Cerebral Cortex and Brainstem
 - 3.2.1. Consciousness State Regulation
 - 3.2.2. Cranial Trauma
 - 3.2.2.1. Etiopathogenesis
 - 3.2.2.2. Symptoms and Syndromes
 - 3.2.2.3. Diagnosis
 - 3.2.2.4. Treatment
 - 3.2.2.5. Prognosis
 - 3.2.3. Metabolic Encephalopathy
 - 3.2.3.1. Hepatic Encephalopathy
 - 3.2.4. Seizures and Epilepsy
 - 3.2.4.1. Types of Seizure Disorders
 - 3.2.4.2. Types of Epilepsy (ILAE Classification) (*International League Against Epilepsy*)
 - 3.2.4.3. Treatment
 - 3.2.5. Narcolepsy

- 3.3. Cerebellar or Vestibular Disturbances
 - 3.3.1. Coordination and Balance
 - 3.3.2. Cerebellar Syndrome
 - 3.3.2.1. 7.3.2.1 Cerebellar Abiotrophy
 - 3.3.3. Vestibular Syndrome
 - 3.3.3.1. Peripheral Vestibular Syndrome
 - 3.3.3.2. Central Vestibular Syndrome
 - 3.3.3.3. Head Trauma and Vestibular Syndrome
 - 3.3.3.4. Temporohyoid Osteoarthropathy
- 3.4. Spinal Alterations
 - 3.4.1. Cervical Stenotic Myelopathy
 - 3.4.1.1. Etiopathogenesis
 - 3.4.1.2. Symptomatology and Neurological Examination
 - 3.4.1.3. Diagnosis
 - 3.4.1.4. Radiology
 - 3.4.1.5. Myelography
 - 3.4.1.6. Magnetic Resonance Imaging, Computerized Axial Tomography, Gammagraphy
 - 3.4.1.7. Treatment
 - 3.4.2. Equine Degenerative Myeloencephalopathy (EDM)
 - 3.4.3. Spinal Trauma
- 3.5. Bacterial, Fungal and Parasitic Infections of the Nervous System
 - 3.5.1. Bacterial Encephalitis or Encephalomyelitis
 - 3.5.1.1. Etiological Agents
 - 3.5.1.2. Symptoms
 - 3.5.1.3. Diagnosis
 - 3.5.1.4. Treatment
 - 3.5.2. Fungal Encephalitis
 - 3.5.3. Equine Protozoal Encephalomyelitis (EPM)
 - 3.5.3.1. Etiopathogenesis
 - 3.5.3.2. Symptoms
 - 3.5.3.3. Diagnosis
 - 3.5.3.4. Treatment
 - 3.5.4. Meningoencephalomyelitis Verminosa
 - 3.5.4.1. Etiopathogenesis
 - 3.5.4.2. Symptoms
 - 3.5.4.3. Diagnosis and Treatment
- 3.6. Viral Infections of the Nervous System
 - 3.6.1. Equine Encephalomyelitis due to Herpesvirus Type -1 (EHV-1)
 - 3.6.1.1. Etiopathogenesis
 - 3.6.1.2. Clinical Picture
 - 3.6.1.3. Diagnosis
 - 3.6.1.4. Treatment
 - 3.6.2. West Nile Virus Encephalomyelitis
 - 3.6.2.1. Etiopathogenesis
 - 3.6.2.2. Clinical Picture
 - 3.6.2.3. Diagnosis
 - 3.6.2.4. Treatment
 - 3.6.3. Rabies
 - 3.6.3.1. Etiopathogenesis
 - 3.6.3.2. Clinical Picture
 - 3.6.3.3. Diagnosis
 - 3.6.3.4. Treatment

- 3.6.4. Borna, Hendra and other Viral Encephalitis Viruses
- 3.7. Ocular Examination Ocular Nerve Blocks and Sub-palpebral Catheter Placement
 - 3.7.1. Anatomy and Physiology of the Eyeball
 - 3.7.2. Optic Nerve Blocks
 - 3.7.3. Ophthalmologic examination
 - 3.7.4. Basic Diagnostic Tests
 - 3.7.5. Advanced Diagnostic Tests
 - 3.7.6. Sub-palpebral Catheter Placement
- 3.8. Palpebral Pathologies Ocular Perforations Entropion Correction
 - 3.8.1. Anatomy of Adnexal Tissues
 - 3.8.2. Eyelid Alterations
 - 3.8.3. Entropion Correction
 - 3.8.4. Ocular Perforations
- 3.9. Corneal Ulcers
 - 3.9.1. General Aspects and Classification of Corneal Ulcers
 - 3.9.2. Simple, Complex and Severe Ulcers
 - 3.9.3. Indolent Ulcer
 - 3.9.4. Infectious Keratitis
 - 3.9.5. Corneal Surgery
- 3.10. Uveitis and Ocular Medical Pathologies
 - 3.10.1. Immune-Mediated Keratitis
 - 3.10.2. Stromal Abscess
 - 3.10.3. Equine Recurrent Uveitis
 - 3.10.4. Crystalline Lens Alterations
 - 3.10.5. Posterior Segment Alterations and Glaucoma
 - 3.10.6. Neoplasms





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*This educational program
will allow you to seamlessly
advance in your career.”*

05 Methodology

This 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 assess 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. 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 program.



Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepared 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 education, 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 adapted in 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 assess and re-assess 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 Equine Dermatology, Neurology, Ophthalmology and Endocrinology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Diploma in Equine Dermatology, Neurology, Ophthalmology and Endocrinology** 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 Diploma in Equine Dermatology, Neurology, Ophthalmology and Endocrinology**

Modality: **online**

Duration: **6 months**

Accreditation: **18 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.



Postgraduate Diploma
Equine Dermatology,
Neurology, Ophthalmology
and Endocrinology

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

Postgraduate Diploma

Equine Dermatology, Neurology,
Ophthalmology and Endocrinology

