



Professional Master's Degree

Physiotherapy and Rehabilitation of Small Animals

Course Modality: Online
Duration: 12 months

Certificate: TECH Technological University

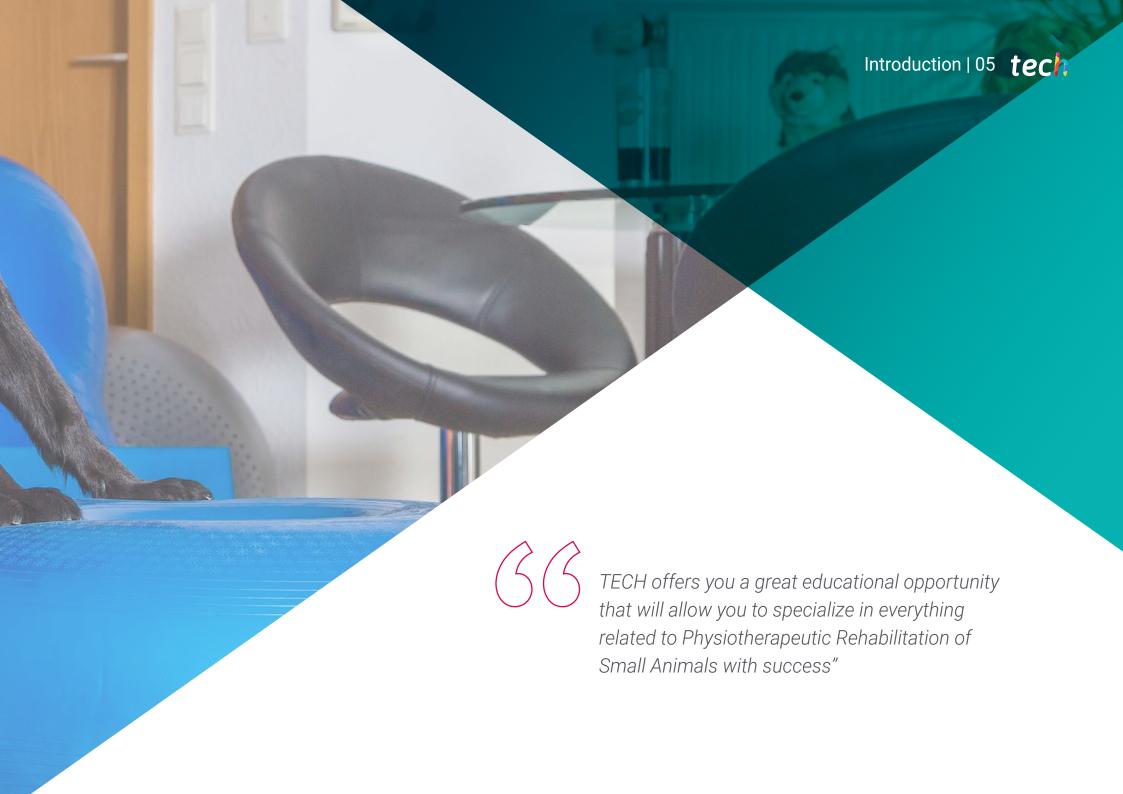
Official No of hours: 1,500 h.

We bsite: www.techtitute.com/pk/veterinary-medicine/professional-master-degree/master-physiotherapy-rehabilitation-small-animals

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In recent years, veterinary medicine has advanced, both in the use of new diagnostic tools and in the introduction of new techniques and treatments. This has increased animals' life expectancy and allowed them to have a better quality of life. It is evident that owners are increasingly concerned about their pets living with the best possible care and in the best possible conditions.

Veterinary Physiotherapy and Rehabilitation is a growing specialty that encompasses not only the sports field, but also rheumatologic or neurological conditions, in older animals, dealing with joint problems, osteoarthritis or other age-related physical problems. The Professional Master's Degree in Physiotherapy and Rehabilitation of Small Animals is a response to the need to offer pet owners a quality service, something that is increasingly expected from owners who are looking for less invasive and more natural techniques.

This program offers complete training in Physiotherapy and Rehabilitation, as it develops the specialized knowledge needed to safely address any situation that may arise.

It complements the theoretical aspects with clinical practice related to the wealth of experience obtained by the course professors, who have a deep understanding of the field as they are active veterinary professionals in veterinary centers specializing in Physiotherapy and Rehabilitation.

At present, one of the main problems affecting continuing postgraduate specialization is the difficulty of being able to balance it with work and personal life. The online format of this program makes it possible for clinical veterinarians to balance their studies with their day-to-day commitments. They are able to access the content at any time, without the need to travel or adhere to a fixed schedule. Therefore, students can easily balance their learning with their daily professional practice, without losing any quality in the process.

This Professional Master's Degree in Physiotherapy and Rehabilitation of Small Animals contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Physiotherapy and Rehabilitation of Small Animals
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- What's new in Physiotherapy and Rehabilitation of Small Animals?
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Physical Therapy and Rehabilitation of Small Animals
- Theoretical lessons, questions to the experts, forums for discussion of controversial topics and individual reflection work
- Access to content from any fixed or portable device with an Internet connection





Update your knowledge in this area and become a prestigious veterinarian capable of successfully taking on the latest challenges in the profession"

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

Its multimedia content, elaborated with the latest educational technology, will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive specialization 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 during the program. To do so, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Physiotherapy and Rehabilitation of Small Animals.

All TECH specializations contain practical clinical case studies that aim to teach students through real simulated environments.

You will examine the main anatomical bone references and the different muscle groups of small animals, with the guidance of professionals who have extensive experience in the sector.





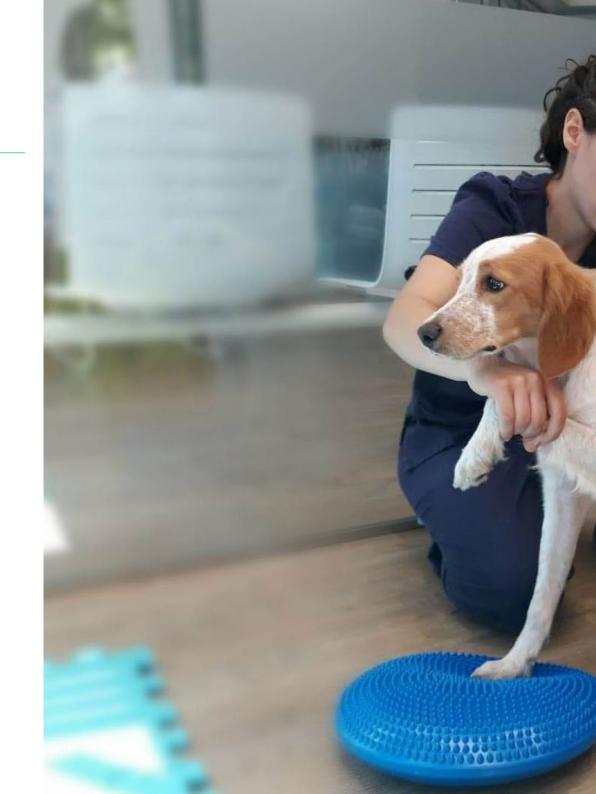


tech 10 | Objectives



General objectives

- Generate specialized knowledge of veterinary physiotherapy and rehabilitation
- Examine the main anatomical bone references
- Determine the main muscles and nerves involved in movement
- Evaluate the patient globally
- Determine the basis for a good functional assessment
- Examine static body position and gait assessment
- Identify pain points or behavior as well as compensatory body positions
- Develop expertise in the identification and quantification of pain in dogs and cats
- Address pain, detection and treatment in veterinary medicine
- Emphasize the importance of neurolocalization to approximate the diagnosis in neurological patients and to guarantee the success of the therapy
- Develop in an orderly manner the neurological exam
- Analyze movement methods as a treatment
- Examine the mechanical analysis of the movement
- Construct exercises from anatomical elements
- Generate local and general effects on the patient
- Determine thermotherapy application techniques
- Introduce ultrasound, laser therapy and electrostimulation modalities
- Evaluate the parameters most commonly used in these techniques
- Establish appropriate protocols for the above therapies in certain pathologies
- Define each of the therapies and specify their use in each clinical case study
- Introduce the benefits of diathermy, magnetotherapy and shockwave therapy
- Examine complementary therapies to Physical Therapy and Rehabilitation







- Generate specialized knowledge in the nutritional management of a patient with osteoarthrosis or obesity
- Develop specialized knowledge in the rehabilitation of feline patients
- Analyze the most frequent conditions in feline patients that may require treatment from a rehabilitation veterinarian
- Determine the importance and value of hydrotherapy in the field of animal physical rehabilitation
- Examine the physical principles that make hydrotherapy an important tool in animal physical rehabilitation
- Determine the characteristics of the sporting dog
- Analyze the optimization of the dog's physical condition
- Review the different sports disciplines
- Identify the most frequent injuries
- Establish the steps of a complete trauma examination
- Evaluate the effects of immobilization on tissues
- Identify the most frequent truama disorders
- Present the possible treatments for each condition, as well as an approach to their management in physical rehabilitation
- Generate specialized knowledge in the most relevant aspects for the indication of, and follow-up to, rehabilitation
- Guarantee a professional rehabilitation process for all patients
- Create a multidisciplinary work plan
- Cover the physiotherapeutic needs of the patient
- Develop an appropriate treatment plan for patients

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Specific objectives

Module 1. Veterinary Physiotherapy and Rehabilitation. Functional Anatomy in Small Animals

- Determine the use of Physiotherapy in Small Animals
- Examine the main anatomical bone references and the different muscle groups
- Analyze the movement of each muscle group
- Develop the most important concepts related to Rehabilitation
- Address muscle components
- Analyze the different phases of inflammation

Module 2. Biomechanics. Functional Assessment

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

Module 3. Physiology of Pain. Neurological Evaluation

- Identify signs related to pain
- Determine the most useful tools to assist in the assessment of pain
- Develop specialized knowledge about pain
- Compile knowledge of the latest therapies used in rehabilitation for the treatment of pain and for the management of neurological patients in rehabilitation
- Review the functioning of the Nervous System to understand the rationale for neurological evaluation
- Study the different parts of the neurological examination

Module 4. Manual Therapies and Kinesitherapy. Bandages

- Develop specialized knowledge through touch and manipulation
- Use movement for therapeutic purposes
- Carry out treatment planning through the use of the therapist's hands
- Restore range of motion in the patient
- Achieve physiological effects in the patient
- Identify a series of limitations in the patient
- Maintain or increase trophism and muscle power

Module 5. Physical Therapies I: Electrotherapy, Laser Therapy, Therapeutic Ultrasound. Thermotherapy

- Determine the benefits and uses of Thermotherapy
- Establish the ultrasound parameters that can be modified in the different therapies, depending on the desired effect
- Examine the parameters of laser therapy and electrotherapy that can be modified in the different therapies, depending on the desired effect
- Analyze the differences between physiological and evoked muscle recruitment
- Develop the mechanisms of pain relief worked with electrotherapy

Module 6. Physical Therapies II: Diathermy, Magnetotherapy, INDIBA, Shockwaves, other therapies used in Rehabilitation. Nutrition

- Examine the different types of diathermy, parameters and functions of each of them
- Define Indiba therapy and study in depth in which cases it is used
- Examine the parameters and functions of magnetotherapy and shock waves that can be modified according to the desired effect
- Justify the use of alternative therapies as a complement to Physiotherapy and Rehabilitation of Small Animals
- Define the concept of modalities such as chiropractic, cranio-sacral therapy and ozone therapy and propose their use as complementary therapies
- Develop the most important concepts of canine nutrition in terms of obesity and osteoarthritis

Module 7. Feline Rehabilitation. Hydrotherapy

- Propose rehabilitation plans adjusted to the peculiarities in the character and management of the feline species both in the clinic environment and at home
- Generate specialized knowledge to detect signs of osteoarthrosis (OA) in the feline species
- Compile therapies and strategies that are well tolerated by the feline species in the Rehabilitation Sessions
- Recognize the main differences between the principles of pool hydrotherapy and underwater treadmill hydrotherapy
- Analyze the indications and contraindications of hydrotherapy
- Examine the differences between swimming and walking in water
- Develop a rehabilitation plan that includes hydrotherapy

Module 8. Sports Medicine. Sports Modalities in Dogs. Most Frequent Pathologies and Prevention

- Examine the key points in the rehabilitation of the performance dog
- Develop a training plan
- Analyze the weak points of a performance dog
- Identify abnormalities in a performance dog
- Generate training plans
- Establish a recovery plan after an injury
- Determine the importance of sports rehabilitation



Module 9. Traumatologic Examination. Effects of Immobilization on Tissues Traumatologic Pathologies in Rehabilitation

- Identify the changes in morphology and composition of different tissues when subjected to immobilization
- Substantiate the physical therapies carried out during the period of tissue remobilization
- Analyze the effects of different medications on immobilized tissues
- Compile the most frequent trauma pathologies of the forelimbs and hindlimbs
- Evaluate the most common musculoskeletal tumors
- Establish treatment guidelines for fractures and joint dislocations

Module 10. Rehabilitation Plan: design of a rehabilitation program and communication with the owner

- Choose the appropriate intervention methods and techniques in each case
- Achieve control of the disease and its risk factors.
- Prevent secondary diseases, complications and sequelae
- · Adapt the residual capacity, modifying the environment to facilitate daily tasks
- Convey as much information about the patient's condition as possible to the patient's owner
- Maintain the follow-up of the pathological process and evolution of the patient
- Ensure a better sense of well-being
- Choose the appropriate intervention methods and techniques in each case
- Generate patient follow-up
- Facilitate the patient's daily life
- Extend the patient's quality of life
- Improve the patient's physical capabilities
- Alleviate the patient's pain
- $\bullet\,$ Inform those responsible for the patients about their status

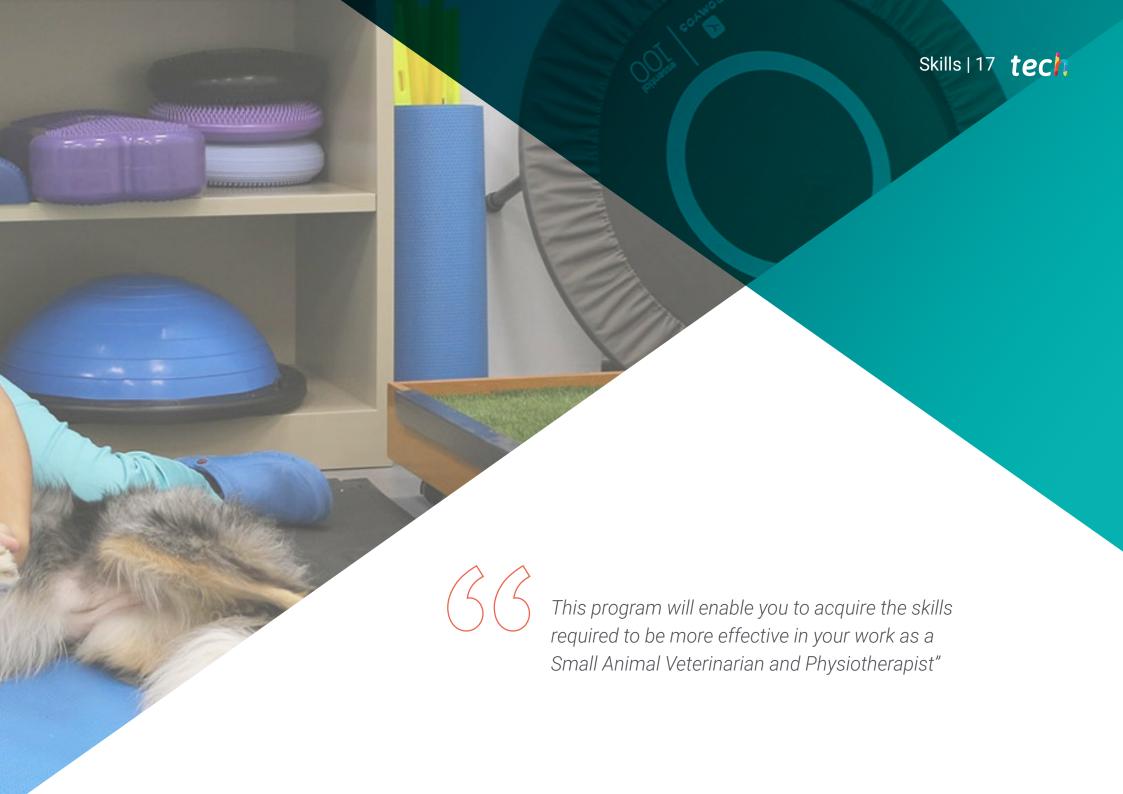






Seize the opportunity to get up to date in the latest developments in Physiotherapy and Rehabilitation of Small Animals"



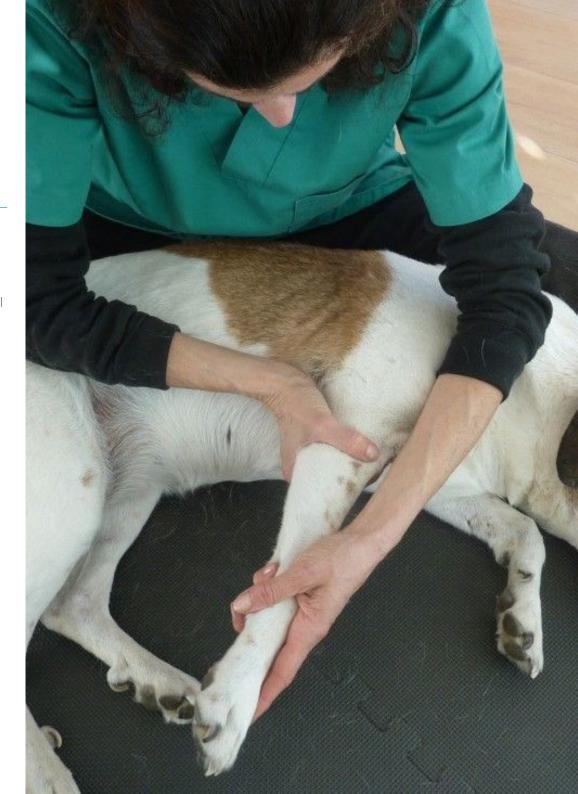


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General skills

- Be able to carry out physiotherapeutic rehabilitation therapies in small animals
- Ensure the welfare of the animals during rehabilitations, respecting their resting times
- Learn to apply the basic knowledge about the different fields of application of small animal rehabilitation and the main characteristics of the populations with which we work
- Be able to evaluate, design, develop and implement work programs with small animals
- Provide students with comprehensive, practical and up-to-date training in a discipline that is increasingly in demand
- Obtain a solid foundation for your professional activity in the clinical sector, elaborating and implementing rehabilitation plans from day one
- Develop specialized knowledge to deal safely with any situation that may arise





- Master topics in the fields of Anatomy and Biomechanics, Neurology and Traumatology, as well as the methodology and application of the different physiotherapeutic techniques
- Have broad knowledge of all the pathologies and situations that can be treated by the rehabilitation veterinarian, beyond the sports world
- · Know, in depth, the most relevant aspects of the musculoskeletal system in rehabilitation
- Have deep knowledge of the main aspects of functional anatomy and the main external skeletal references, as well as the most important muscle groups and their main function in the organism
- Be able to perform a functional assessment of the patient in physiotherapy, which is essential to be able to perform correct clinical action
- Have a clear understanding of the biomechanical principles, as well as knowing how to correctly perform a good functional assessment
- Know and examine the physiological mechanisms of pain in order to understand the mode of action in most of the techniques used in rehabilitation
- Be able to recognize, identify and locate a neurological condition
- Know the forms of natural manual therapy that include physical, psychological and emotional terms
- Know how to re-establish the functionality of the tissues using different modalities through manual therapies, thermotherapy, laser therapy or electrotherapy, among others
- Know the characteristics of ultrasound therapy, laser therapy and electrostimulation
- Address the characteristics of diathermy, Indiba, magnetotherapy and shockwave therapy

- Gain in-depth knowledge of the characteristics that make water an ideal medium for the recovery of numerous pathologies
- Determine how to prevent and treat injuries derived from sports practice, recovering the functionality of the injured area as soon as possible and avoiding the appearance of sequelae
- Understand the importance of preventive medicine to improve sports performance and prevent injuries through nutrition, physical training, and pre- and post-competition preparation
- Know the therapeutic possibilities of each pathology and the complications of these treatments, in order to be able to monitor the patient's evolution, adapt the therapies and achieve optimal results



A program that will allow you to acquire high level qualifications to advance in this very competitive field"





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Management



Ms. Ceres Vega-Leal, Carmen

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

Professors

Ms. Laliena Aznar, Julia

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

Ms. Hernández Jurado, Lidia

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



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Ms. Picón Costa, Marta

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

Ms. Pascual Veganzones, María

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

Ms. Rodríguez-Moya Rodríguez, Paula

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

Structure and Content

The structure of the contents has been designed by the best professionals in the field of animal physiotherapy rehabilitation, with extensive experience and recognized prestige in the profession. They are backed by an exhaustive volume of cases which have been reviewed, studied and diagnosed, and they have extensive knowledge of new technologies applied to veterinary medicine. This will ensure that, upon completion of the course, you will be fully qualified to practice in this field from a multidisciplinary approach that favors the longevity and quality of life of the animal.



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Module 1. Veterinary Physiotherapy and Rehabilitation. Functional Anatomy in Small Animals

- 1.1. Physiotherapy and Rehabilitation of Small Animals
 - 1.1.1. Introduction
 - 1.1.1.1 Medical History
 - 1.1.1.2. Veterinary Rehabilitation and Physical Therapy
 - 1.1.2. Species Susceptible to be Treated with Physiotherapy
 - 1.1.3. Objectives of Physiotherapy
 - 1.1.4. Techniques in Veterinary Physiotherapy
 - 1.1.5. Indications of Physiotherapy
- 1.2. Morphology, Structure and Function
 - 1.2.1. Bone
 - 1.2.2. Joints
 - 1.2.3. Muscle
- 1.3. The Skeleton of the Dog. Important Anatomical Bone References
 - 1.3.1. Head and Vertebrae
 - 1.3.2. Thoracic Limb
 - 1.3.3. Pelvic Limb
- 1.4. Head and Neck Muscle
 - 1.4.1. Head Muscles
 - 1.4.2. Motor Muscles of the Head
 - 1.4.3. Neck Muscles
- 1.5. Trunk and Tail Muscles
 - 1.5.1. Muscles of the Spine
 - 1.5.2. Thoracic Muscles
 - 153 Abdominal Muscles
 - 1.5.4. Tail Muscles
- 1.6. Thoracic Limb Muscles
 - 1.6.1. Thoracic Girdle Muscles
 - 1.6.2. Shoulder Muscles
 - 163 Flbow Muscles
 - 1.6.4. Muscles of Carpus and Fingers

- 1.7. Pelvic Limb Muscles
 - 1.7.1. Pelvic Girdle Muscles
 - 1.7.2. Muscles of the Hip
 - 1.7.3. Muscles of the Knee
 - 1.7.4. Muscles of Tarsus and Fingers
- 1.8. Innervation and Vascularization
 - 1.8.1. Brachial Plexus
 - 1.8.2. Lumbosacral Plexus
 - 1.8.3. Other Important Nerves
- 1.9. Skeletal Muscle Contraction
 - 1.9.1. Mechanism of Muscle Contraction
 - 1.9.2. Types of Muscle Contraction
 - 1.9.3. Definitions
- 1.10. Physiology of Inflammation
 - 1.10.1. What Is Inflammation?
 - 1.10.2. Phases of Inflammation
 - 1.10.3. Tissue Repair

Module 2. Biomechanics. Functional Assessment

- 2.1. Overall Functional Assessment
 - 2.1.1. Patient Identification
 - 2.1.2. Oualitative and Ouantitative Assessment of the Patient
 - 2.1.3. Assessment of Skin, Subcutaneous Tissue and Musculature
 - 2.1.3.1. Muscle Modifications
- 2.2. Assessment of Gait and Static Positioning
 - 2.2.1. Dynamic Physical Examination
 - 2.2.1.1. Characteristics of the Gait
 - 2.2.2. Static Physical Evaluation
- 2.3. Functional Examination of the Locomotor System: Forelimb
 - 2.3.1. Shoulder
 - 2.3.2. Elbow
 - 2.3.3. Carpus and Metacarpus
 - 2.3.4. Phalanges

2.4. Functional Examination of the Locomotor System: Hind	limb
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- 2.4.1. Hip
 - 2.4.1.1. Techniques Used in Hip Examination
- 2.4.2. knee
- 2.4.3. Tarsus and Metatarsus
- 2.4.4. Brief Mention of the Bioarth Scale
- 2.5. Functional Examination of the Spine
 - 2.5.1. Cervical Spine
 - 2.5.2. Thoracic Spine
 - 2.5.3. Lumbar and Sacral Spine
- 2.6. Biomechanics
 - 2.6.1. Basis of Biomechanics
 - 2.6.2. Dempster Diagram
 - 2.6.3. Free Body Diagram
- 2.7. Motor Gesture and Background Automatism
 - 2.7.1. Motor Gesture
 - 2.7.2. Bottom Automatism
- 2.8. Levers and Pulleys
 - 2.8.1. Newton's Laws
 - 2.8.2. Lever System
 - 2.8.3. Types of Levers
 - 2.8.4. Pulleys
- 2.9. Functional Assessment: Most Frequent Forelimb and Spine Injuries
 - 2.9.1. Forelimb
 - 2.9.1.1. Elbow Dysplasia
 - 2.9.2. Rachis
 - 2.9.2.1. Hernia in Thoracolumbar Region
 - 2.9.2.2. Cauda Equina Syndrome
- 2.10. Functional Assessment of the Most Frequently Occurring Hindlimb Injuries
 - 2.10.1. Hindlimb
 - 2.10.1.1. Hip Dysplasia
 - 2.10.1.2. Patella Dislocation
 - 2.10.1.3. Ruptured Anterior Cruciate Ligament of the Knee

Module 3. Physiology of Pain. Neurological Evaluation

- 3.1. Introduction
 - 3.1.1. What is Pain?
 - 3.1.2. How to Identify Pain?
 - 3.1.3. How to Quantify Pain?
 - 3.1.4. Perception of Pain in Different Organs and Tissues
- 3.2. Types of Pain
 - 3.2.1. Classification of the Types of Pain
 - 3.2.2. Terminology Related to Pain
 - 3.2.3. Components of Pain
- 3.3. Neurophysiology of Pain
 - 3.3.1. Transduction
 - 3.3.2. Transmission
 - 3.3.3. Modulation
 - 3.3.4. Perception
- 3.4. Chronic Pain and Related Types of Pain
 - 3.4.1. Neurophysiology of Chronic Pain
 - 3.4.2. Pain due to Osteoarthrosis (oa)
 - 3.4.3. Neuropathic Pain
 - 3.4.4. Myofascial Pain
- 3.5. The Role of Rehabilitation in Pain Management
 - 3.5.1. Review of Pain Inhibition Mechanisms
 - 3.5.2. Analgesic Therapies Used in Rehabilitation
 - 3.5.3. Management of the Patient with Acute Pain
 - 3.5.4. Management of the Chronic Pain Patient
- 3.6. Neurological Evaluation I
 - 3.6.1. Introduction
 - 3.6.2. Motor System: Review of the Concepts of Upper Motor Neuron and Lower Motor Neuron
 - 3.6.3. Sensory System: Review of Cranial Nerves and Spinal Nerves

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4.3.1. Lymphatic System

4.3.3. Indications4.3.4. Contraindications

4.3.2. Purpose of Lymphatic Drainage

3.7.	Neurological Evaluation II	4.4.	Kinesitherapy I	
0.7.	3.7.1. Review	1. 1.	4.4.1. What Is Kinesitherapy?	
	3.7.2. Observation of Mental State		4.4.2. General Objectives	
	3.7.3. Behavioral Assessment		4.4.3. Classification	
	3.7.4. Posture Observation	4.5.	Kinesitherapy II	
	3.7.5. Gait Evaluation		4.5.1. Therapeutic Exercises	
3.8.	Neurological Evaluation III. Neurological Tests		4.5.1.1. Passive Kinesitherapy	
	3.8.1. Evaluation of Cranial Nerves		4.5.1.2. Active Kinesitherapy	
	3.8.2. Evaluation of Spinal Reflexes		4.5.1.2.1. Active Resisted Kinesitherapy	
	3.8.3. Postural Reaction Tests 4.5.1.2.2. Active Assisted Kinesitherapy			
3.9.	Neurological Evaluation III		4.5.2. Stretching	
	3.9.1. Evaluation of Cranial Nerves		4.5.3. How to Establish an Exercise Plan?	
	3.9.2. Postural Reactions 4.6. Myofascial Manual Therapy		Myofascial Manual Therapy	
3.10.	3.10. Neurological Patient		4.6.1. Concept of Fascia and Fascial System	
	3.10.1. General Care		4.6.2. Techniques of Myofascial Therapy	
	3.10.2. Postural Rehabilitation Exercises		4.6.3. Trigger Points	
	3.10.3. Neurological Facilitation Exercises	4.7.	Evaluation of the Articular Arch	
Mad	hula A. Manusal Theoretica and Mineritherrory. Dandanas		4.7.1. Definition of Rom and Arom	
Module 4. Manual Therapies and Kinesitherapy. Bandages			4.7.2. Elastic Barrier, Paraphysiological Zone and Anatomical Barrier	
4.1.	Manual Therapy I		4.7.3. End Feel	
	4.1.1. Manual Therapy	4.8.	Neuromuscular Bandaging	
	4.1.2. Physiological Modifications		4.8.1. Introduction	
	4.1.3. Therapeutic Effects		4.8.2. Description and Characteristics	
4.2.	Massage		4.8.3. Physiological Basis	
	4.2.1. Types of Massages		4.8.4. Applications	
	4.2.2. Indications	4.9.	Gait Re-Evaluation	
	4.2.3. Contraindications		4.9.1. How is Motor Control Altered?	
4.3.	Lymphatic Drainage		4.9.2. Consequences of Altered Motor Control	

4.9.3. Retraining Gait

- 4.10. Bandages
 - 4.10.1. Modified Robert Jones Bandage
 - 4.10.2. Ehmer Bandage
 - 4.10.3. Carpal Flexion Bandage
 - 4.10.4. Velpeau Bandage
 - 4.10.5. External Fixator Bandage
 - 4.10.6. Complications of Bandages

Module 5. Physical Therapies I: Electrotherapy, Laser Therapy, Therapeutic Ultrasound. Thermotherapy

- 5.1. Thermotherapy
 - 5.1.1. Thermotherapy
 - 5.1.2. Application of Thermotherapy
 - 5.1.3. Effects
 - 5.1.4. Indications
 - 5.1.5. Contraindications
- 5.2. Ultrasound I
 - 5.2.1. Definition
 - 5.2.2. Parameters
 - 5.2.3. Indications
 - 5.2.4. Contraindications/Precautions
- 5.3. Ultrasound II
 - 5.3.1. Thermal Effects
 - 5.3.2. Mechanical Effects
 - 5.3.3. Uses of Therapeutic Ultrasound
- 5.4. Laser Therapy I
 - 5.4.1. Introduction to Laser Therapy
 - 5.4.2. Laser Properties
 - 5.4.3. Laser Classification
 - 5.4.4. Types of Lasers Used in Rehabilitation

- 5.5. Laser Therapy II
 - 5.5.1. Effects of Lasers on Tissues
 - 5.5.1.1. Wound Healing
 - 5.5.1.2. Bone and Cartilage
 - 5.5.1.3. Tendon and Ligament
 - 5.5.1.4. Peripheral Nerves and Spinal Cord
 - 5.5.2. Analgesia and Pain Control
- 5.6. Laser Therapy III
 - 5.6.1. Application of Laser Therapy in Dogs
 - 5.6.2. Precautions
 - 5.6.3. Dosage Guide for Different Pathologies
- 5.7. Electrostimulation I
 - 5.7.1. Terminology
 - 5.7.2. History of Electrostimulation
 - 5.7.3. Indications
 - 5.7.4. Contraindications and Precautions
 - 5.7.5. Types of Current
- 5.8. Electrostimulation II
 - 5.8.1. Parameters
 - 5.8.2. Electrodes
 - 5.8.3. What to Look for When Buying an Electrostimulator?
- 5.9. Electrostimulation III-NMES
 - 5.9.1. Types of Muscle Fibers
 - 5.9.2. Recruitment of Muscle Fibers
 - 5.9.3. Biological Effects
 - 5.9.4. Parameters
 - 5.9.5. Placement of Electrodes
 - 5.9.6. Precautions
- 5.10. Electrostimulation IV-TENS
 - 5.10.1. Pain Control Mechanisms
 - 5.10.2. TENS for Acute Pain
 - 5.10.3. TENS for Chronic Pain
 - 5.10.4. Parameters
 - 5.10.5. Placement of Electrodes

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Module 6. Physical Therapies II: Diathermy, Magnetotherapy, INDIBA, Shockwaves, other therapies used in Rehabilitation. Nutrition

6.1.	Diathermy
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6	.1	.1	١.	Introdu	uction	and	Definition	of Diathermy
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- 6.1.2. Types of Diathermy
 - 6.1.2.1. Short Wave
 - 6.1.2.2. Microwave
- 6.1.3. Physiological Effects and Clinical Use
- 6.1.4. Indications
- 6.1.5. Contraindications and Precautions

6.2. INDIBA®

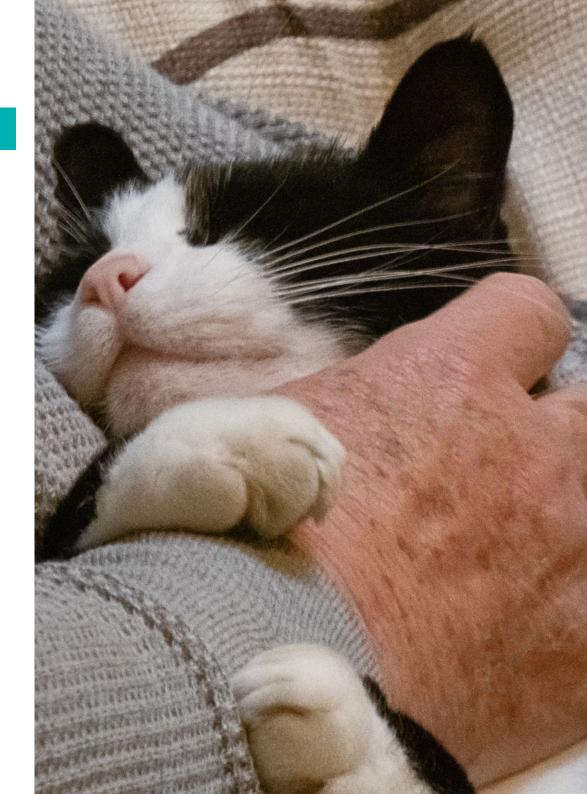
- 6.2.1. INDIBA® Radiofrequency Concept
- 6.2.2. Physiological Effects of Radiofrequency
- 6.2.3. Indications
- 6.2.4. Contraindications and Precautions

6.3. Magnetotherapy

- 6.3.1. Introduction and Definition of Magnetotherapy
- 6.3.2. Biomagnetism
 - 6.3.2.1. Effects of Magnetotherapy
 - 6.3.2.2. Natural Magnets
 - 6.3.2.3. Properties of Magnetic Poles
- 6.3.3. Pulsed Magnetic Fields
 - 6.3.3.1. Physiological Effects and Clinical Use
 - 6.3.3.2. Indications
 - 6.3.3.3. Contraindications and Precautions

6.4. Shock Waves

- 6.4.1. Introduction and Definition of Shock Waves
- 6.4.2. Types of Shockwaves
- 6.4.3. Physiological Effects and Clinical Use
- 6.4.4. Indications
- 6.4.5. Contraindications and Precautions



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6.5.	Holistic	Therapies and Integrative Medicine				
	6.5.1.	Introduction and Definitions				
	6.5.2.	Types of Holistic Therapy				
	6.5.3.	Physiological Effects and Clinical Use				
	6.5.4.	Indications				
	6.5.5.	Contraindications and Precautions				
6.6.	Traditional Chinese Medicine					
	6.6.1.	Basis of the MTC				
	6.6.2.	Acupuncture				
		6.6.2.1. Acupoints and Meridians				
		6.6.2.2. Actions and Effects				
		6.6.2.3. Indications				
		6.6.2.4. Contraindications and Precautions				
	6.6.3.	Chinese Herbal Medicine				
	6.6.4.	Tui-Na				
	6.6.5.	Diet Therapy				
	6.6.6.	Qi-Gong				
6.7.	Clinica	Clinical Nutrition in Obesity and Osteoarthrosis				
	6.7.1.	Introduction				
	6.7.2.	Definition of Obesity				
		6.7.2.1. Body Condition Evaluation				
	6.7.3.	Nutritional Management and Feed-Based Dietary Plan				
	6.7.4.	Nutritional Management Based on Natural Food				
	6.7.5.	Complements and Supplements				
6.8.	Chirop	ractic				
	6.8.1.	Introduction and Concept of Chiropractics				
	6.8.2.	Vertebral Subluxation Complex (VSVC)				
	6.8.3.	Physiological Effects				
	6.8.4.	Indications				

Contraindications and Precautions

6.8.5.

6	9	Cranio-Sacral	Therany

- 6.9.1. Introduction
- 6.9.2. Use in Veterinary Medicine
- 6.9.3. Physiological Effects and Benefits
- 6.9.4. Indications
- 6.9.5. Contraindications and Precautions

6.10. Ozone Therapy

- 6.10.1. Introduction
 - 6.10.1.1. Oxidative Stress
- 6.10.2. Physiological Effects and Clinical Use
- 6.10.3. Indications
- 6.10.4. Contraindications and Precautions

Module 7. Feline Rehabilitation. Hydrotherapy

- 7.1. Feline Rehabilitation I: Important Aspects
 - 7.1.1. Signs of Pain in the Feline Patient
 - 7.1.2. The Importance of the Environment and Management in the Feline Patient
 - 7.1.3. Main Pathologies Susceptible to Rehabilitation in Felines
- 7.2. Feline Rehabilitation II: Degenerative Joint Disease in Felines
 - 7.2.1. Clinical Manifestations
 - 7.2.2. Orthopedic Examination
 - 7.2.3. Radiological Peculiarities
 - 7.2.4. Weight Management
- 7.3. Feline Rehabilitation III: The Post-Surgical Patient
 - 7.3.1. Introduction
 - 7.3.2. Special Care and Stress Management
 - 7.3.3. Rehabilitation Therapies and Techniques
- 7.4. Feline Rehabilitation IV: Considerations in Rehabilitation Plans
 - 7.4.1. The Environment and Structuring of the Sessions
 - 7.4.2. Most Tolerated Therapies
 - 7.4.3. Strategies for the Execution of Therapeutic Exercises
 - 7.4.4. Home Modifications and Recommendations

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7.5.	5. Hydrotherapy I: Physical Principles of Water			
	7.5.1.	Introduction		
	7.5.2.	Relative Density		
	7.5.3.	Buoyancy		
		Surface Tension		
	7.5.5.	Viscosity		
	7.5.6.	Hydrostatic Pressure		
	7.5.7.	Thermal Capacity		
7.6 Hy	6 Hydrotherapy II: Benefits and Indications			
	7.6.1.	Indications in Patients with Neurological Problems		
	7.6.2.	Indications in Patients with Orthopedic Problems		
	7.6.3.	Indications in Overweight Patients		
	7.6.4.	Indications in Sports Patients		
7.7.	Hydroth	nerapy III: Precautions, Contraindications and Special Care		
	7.7.1.	Precautions		
	7.7.2.	Contraindications		
	7.7.3.	Special Care		
7.8.	Hydroth	nerapy IV: Modalities I		
	7.8.1.	Underwater Tape		
	7.8.2.	Indications and Advantages		
	7.8.3.	Precautions and Contraindications		
7.9. Hydrotherapy V: Modalities II		nerapy V: Modalities II		
	7.9.1.	Swimming and Other Pool Exercises		
	7.9.2.	Indications and Advantages		
	7.9.3.	Precautions and Contraindications		
	7.9.4.	Main Differences between the Two Modalities		
7.10.	Hydroth	nerapy VI: Development of a Hydrotherapy Plan		
	7.10.1.	When to Implement Hydrotherapy in the Rehabilitation Plan?		
	7.10.2.	Duration of Therapy		
	7.10.3.	Water Temperature		
	7.10.4.	Water Quality Parameters		
	7.10.5.	The Importance of the Drying		

Module 8. Sports Medicine. Sports Modalities in Dogs. Most Frequent Pathologies and Prevention

8.1. Characteristics of the Athletic Doc

- 8.1.1. Definition of the Athletic Dog
- 8.1.2. Characteristics of the Athletic Dog
- 8.1.3. Importance of Rehabilitation in the Sporting Dog
- 8.2. Physiology of Exercise
 - 8.2.1. Definitions
 - 8.2.2. Phases of the Exercise
 - 8.2.3. Adaptations of the Organism
- 8.3. Sports Modalities I. Agility
 - 8.3.1. Definition
 - 8.3.2. Categories, Levels and Modalities
 - 8.3.3. Agility Dog Morphology
- 8.4. Sport Modalities II. Canicross, Bikejoring, Mushing
 - 8.4.1. Canicross
 - 8.4.2. Bikejoring
 - 8.4.3. Medium- and Long-Distance Mushing
 - 8.4.4. Other Sports Modalities
- 8.5. Specific Nutrition for Sporting Dogs
 - 8.5.1. Basic Concepts
 - 8.5.1.1. Energy Requirements
 - 8.5.2. Basic Food
 - 8.5.2.1. Concepts of Raw Food
 - 8.5.3. Complements and Supplements
 - 8.5.4. Aspects to Consider
- 8.6. Most Frequent Pathologies
 - 8.6.1. Thoracic Limb
 - 8.6.2. Pelvic Limb
 - 8.6.3. Other Pathologies

8.7. Why Are They Injured? 8.7.1. Main Causes of Injuries 8.7.2. How to Prevent Injuries 8.7.3. Non-Musculoskeletal Pathologies 8.8. The Working Dog 8.8.1. Selection of the Working Dog 8.8.2. Preparation. of the Working Dog 8.8.3. Care of the Working Dog Sport and Proprioception 8.9.1. What is Proprioception? 8.9.2. Core Musculature 8.9.3. Proprioceptive Exercises 8.10. Training Plan 8.10.1. Start Training 8.10.2. Importance of a Good Warm-Up 8.10.3. Importance of Good Cool Down Module 9. Traumatological Examination. Effects of Immobilization on Tissues Traumatological Pathologies in Rehabilitation 9.1. Traumatological Examination 9.1.1. Forelimbs 9.1.2. Hindlimbs 9.2. Effects of Immobilization on Different Tissues I 9.2.1. Bone 9.2.2. Ligaments and Tendons Effects of Immobilization on Different Tissues II 9.3.1. Muscle 9.3.2. Cartilage 9.4. Fractures and Dislocations 9.4.1. Fracture Management 9.4.2. Dislocation Management

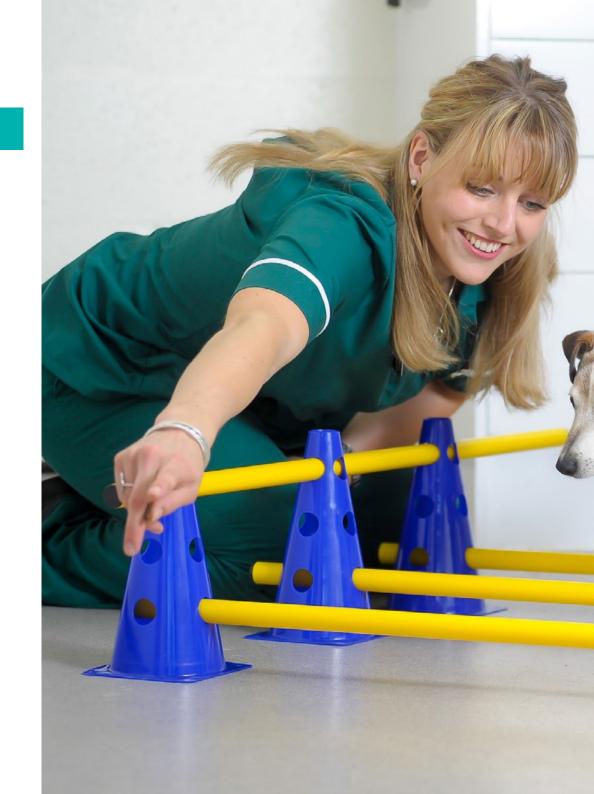
٥.٥.	ПР				
	9.5.1.	Hip Dysplasia			
	9.5.2.	Avascular Necrosis of the Femoral Head			
9.6.	Knee				
	9.6.1.	Patella Dislocation			
	9.6.2.	Rupture of the Anterior Cruciate Ligament			
	9.6.3.	OCD of the Knee			
9.7.	Elbow a	and Shoulder			
	9.7.1.	Elbow Dysplasia			
		9.7.1.1. Fragmented Medial Coronoid Process			
		9.7.1.2. OCD of the Elbow			
		9.7.1.3. Non-Union of the Anconic Process			
		9.7.1.4 Joint Incongruence			
	9.7.2.	Shoulder OCD			
	9.7.3.	Medial Shoulder Instability			
9.8.	Muscular Pathologies				
	9.8.1.	Fibrotic Contracture of the Infraspinatus Muscle			
	9.8.2.	Contracture of the Flexor Muscles of the Forearm			
	9.8.3.	Quadriceps Contracture			
	9.8.4.	Fibrotic Myopathy of the Gracilis Muscle			
9.9.	Tendon	and Ligament Pathologies			
	9.9.1.	Bicipital Tenosynovitis			
	9.9.2.	Tendinopathy of the Supraspinatus Muscle			
	9.9.3.	Carpal Hyperextension			
	9.9.4.	Patellar Tendon Rupture			
	9.9.5.	Achilles Tendon Rupture			
9.10.	Other P	athologies			
	9.10.1.	Panosteitis			
	9.10.2.	Hypertrophic Osteopathy			
	9.10.3.	Musculoskeletal Tumors			

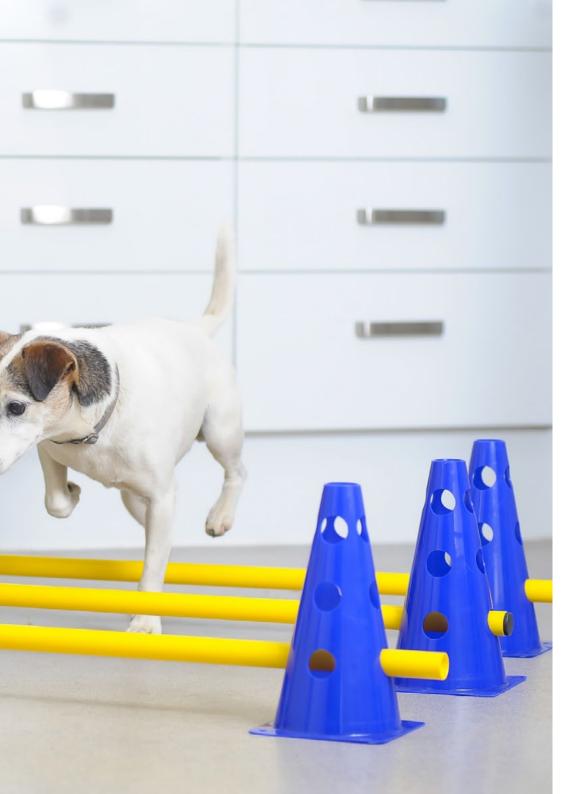
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tech 34 | Structure and Content

Module 10. Rehabilitation Plan: design of a rehabilitation program and communication with the owner

- 10.1.1. What Cases Respond to Physical Therapy and Rehabilitation?
- 10.1.2. Objectives and Working Methods
- 10.1.3. Inconveniences and Circumstances to Consider
- 10.1.4. What to Evaluate in Rehabilitation?
- 10.2. How do I Rehabilitate?
 - 10.2.1. The Therapist-Patient Bond
 - 10.2.2. Adaptation to the Patient
 - 10.2.3. Patient Motivation
 - 10.2.4. Fundamental Aspects of a Rehabilitation Program
 - 10.2.4.1. Frequency (F)
 - 10.2.4.2. Intensity
 - 10.2.4.3. Duration
 - 10.2.4.4. Types of Exercise
- 10.3. Designing a Rehabilitation Plan
 - 10.3.1. Optimize and Make the Rehabilitation Center's Time and Space Cost-Effective
 - 10.3.2. Individualization of the Therapeutic Protocol
 - 10.3.3. Success of the Rehabilitation Plan
- 10.4. Management of a Veterinary Center
 - 10.4.1. Factors to Consider
 - 10.4.2. Service to the Veterinarian/Referral Center
 - 10.4.3. Are Social Networks Important?
- 10.5. Communication with the Owner and/or Person Responsible for the Animal
 - 10.5.1. Quality of Care
 - 10.5.2. Owner Integration in Therapy
 - 10.5.3. Communication with the Owner
- 10.6. Rehabilitation and Physiotherapy in Spinal Cord Injuries
 - 10.6.1. Introduction
 - 10.6.2. Most Frequent Neurology Pathologies
 - 10.6.3. Therapeutic Generalities





Structure and Content | 35 tech

10.7. Rehabilitation and Physiotherapy of Patients with Osteoarthrosis

10.7.1. Environment

10.7.2. Concomitant Diseases

10.7.3. Weight Control

10.7.4. Rehabilitation and Physical Therapy Plan

10.8. Fracture Rehabilitation

10.8.1. Diaphyseal Fractures

10.8.2. Joint Fractures

10.8.3. Fractures that Do Not Close

10.9. Pre- and Post-Surgical Rehabilitation

10.9.1. Elbow Dysplasia

10.9.2. Hip Dysplasia

10.9.3. Cruciate Ligament Rupture

10.10. Other Rehabilitation Plans

10.10.1. Diseases of Young Children under 1 Year of Age

10.10.2. Preventive Rehabilitation

10.10.3. Considerations to Be Taken into Account in the Cardiopathy Patient



If what you want is to advance in your profession and become a prestigious veterinarian, you're in the right place"



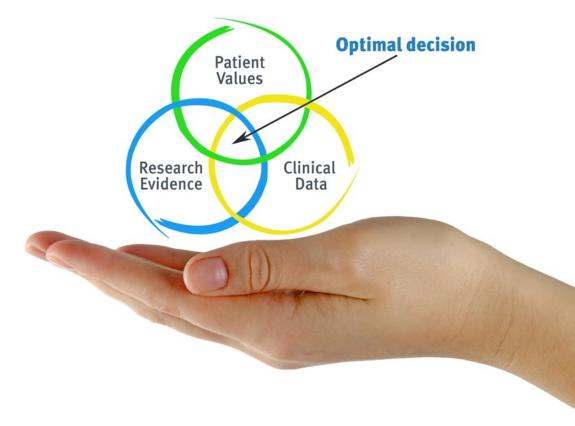


tech 38 | Methodology

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.



Methodology | 41 tech

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.

tech 42 | Methodology

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

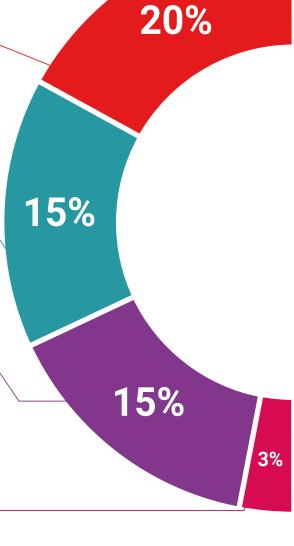
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch 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.



Effective learning ought to be contextual. Therefore, TECH presents real cases in which



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.





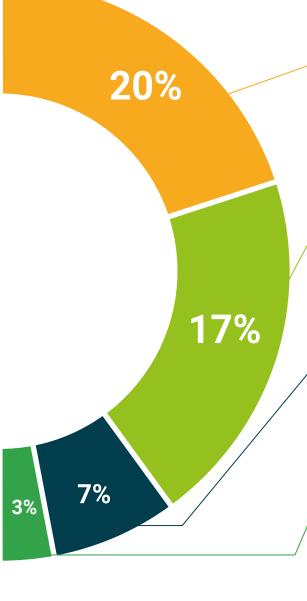
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







tech 46 | Certificate

This **Professional Master's Degree in Physiotherapy and Rehabilitation of Small Animals** contains the most complete and up-to-date scientific program on the market.

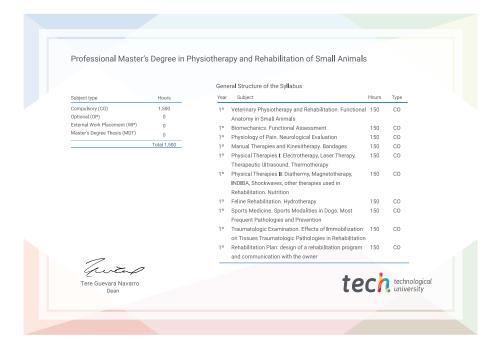
After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery*.

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

Title: Professional Master's Degree in Physiotherapy and Rehabilitation of Small Animals

Official No of hours: 1,500 h.





^{*}Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health confidence people
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guarantee accreditation teaching
institutions technology learning



Professional Master's Degree

Physiotherapy and Rehabilitation of Small Animals

Course Modality: Online
Duration: 12 months

Certificate: TECH Technological University

Official N° of hours: 1,500 h.

