

Postgraduate Diploma Bone Pathophysiology





Postgraduate Diploma Bone Pathophysiology

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

Website: www.techtute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-bone-pathophysiology

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Study Methodology

p. 22

06

Certificate

p. 32

01

Introduction

Bone is a complex tissue and requires specialized knowledge to understand the fundamental activities it carries out which is why it is important for veterinary professionals to update their knowledge with the latest developments in this field.





“

This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your knowledge in Bone Pathophysiology”

The teaching team of this Postgraduate Diploma in Bone Pathophysiology has made a careful selection of the different state-of-the-art techniques for experienced professionals working in the veterinary field.

This Postgraduate Diploma addresses the most relevant and significant osteology topics for the professional in order to achieve their preparation in bone diseases due to malformations, aberrations in function and alterations due to fracture-causing forces.

To achieve this specialized knowledge of the bone we must emphasize the key points of osteogenesis, i.e. bone formation. On the other hand, arthroscopy has undergone a great impulse thanks to the great technological advances of the end of the 20th century with the use of fiber optics instead of glass and mini-cameras with color separation for better intra-articular vision.

Nowadays, thanks to arthroscopy, joints rarely have to be opened, pain is much less and the patient can walk for a few hours after the treatment, achieving a much greater improvement. Although arthroscopy requires a significant investment and continuous training, its use has spread all over the world, making it a common practice in veterinary hospitals.

In addition, this program includes 20 of the most important orthopedic diseases that affect dogs and cats, as well as specialized theoretical and practical information to reach a correct diagnosis. It develops the most important characteristics of each of these diseases in relation to breed, sex and incidence in the veterinary clinic.

The teachers in this training are university professors with between 10 and 50 years of classroom and hospital experience. They are professors from schools on different continents, with different ways of doing surgery and with world-renowned surgical techniques. This makes this Postgraduate Diploma a unique training program, different from any other that may be offered at this time by other universities.

As it is an online program, the student is not constrained by fixed schedules or the need to move to another physical location, but rather, they can access the contents at any time of the day, allowing them to balance their professional or personal life with their academic life as they please.

This **Postgraduate Diploma in Bone Pathophysiology** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- ♦ Practical cases presented by experts in Bone Pathophysiology
- ♦ The graphic, schematic, and practical contents with which they are created, 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 Bone Pathophysiology
- ♦ 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



Incorporate the latest developments in Traumatology and Orthopedic Surgery into your daily practice with this highly scientifically rigorous specialization"

“

This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your knowledge in Bone Pathophysiology”

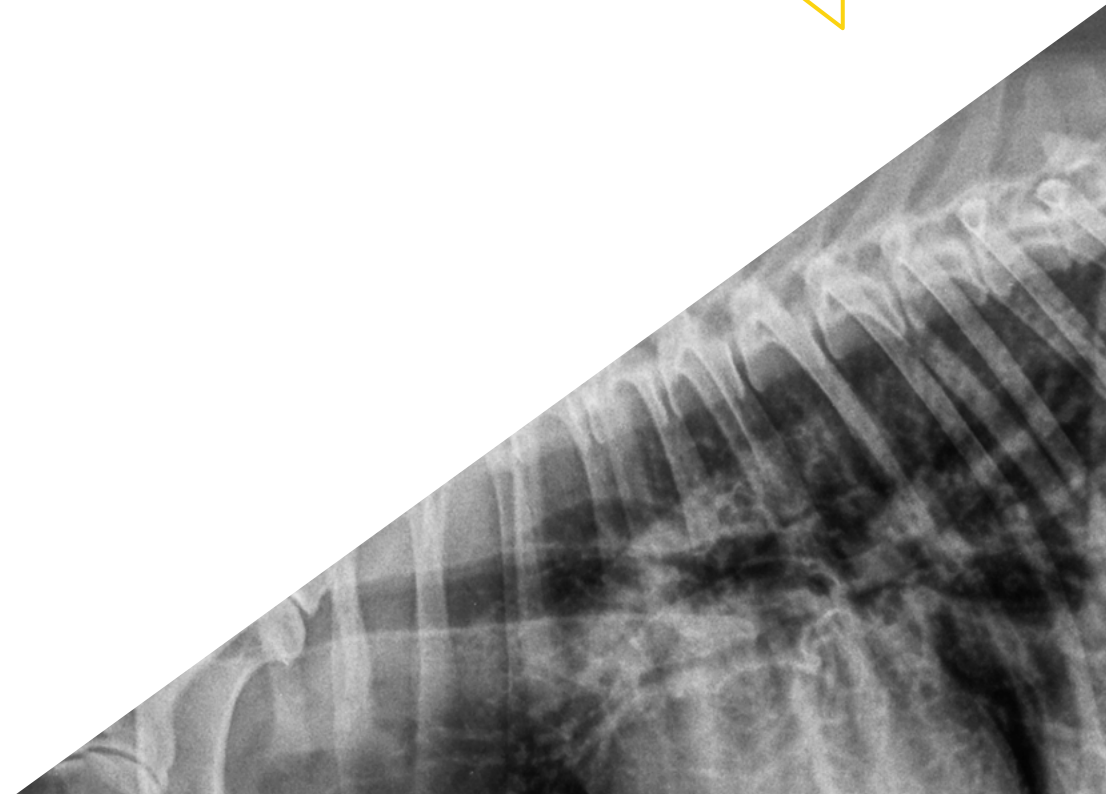
This program comes with the best educational material, providing you with a contextual approach that will facilitate your learning.

This Postgraduate Diploma is the best option you can find to specialize in Bone Pathophysiology.

Its teaching staff includes professionals from the veterinary field, who bring the experience of their work to this training, as well as recognized 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 learning programmed to study in real situations.

This program is designed around Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Bone Pathophysiology.



02 Objectives

The Postgraduate Diploma in Bone Pathophysiology is oriented to facilitate the performance of the professional dedicated to veterinary medicine with the latest advances and newest treatments in the sector.





“

You will learn all about bone physiology and the influence of the same in a patient with bone diseases in the hormonal system that governs the bone”



General Objectives

- ♦ Substantiate knowledge of cytology and bone histology
- ♦ Develop bone physiology and its influence on the hormonal system governing bone in a patient with bone disease
- ♦ Determine how to carry out bone repair, clinical radiographic assessment and fracture
- ♦ Analyze the forces acting on the skeletal body causing stress and the absorption of that force depending on the magnitude and direction of the force absorbed by the body
- ♦ Examine the different types of bone repair that exist in a bone depending on the method of fixation
- ♦ Analyze arthroscopy techniques in different joints
- ♦ Examine arthroscopic visualization
- ♦ Evaluate arthroscopic instrumentation
- ♦ Develop surgical techniques guided by arthroscopy
- ♦ Identify the three possible orthopedic conditions in each clinical case
- ♦ Identify the definitive orthopaedic disease after ruling out those that do not apply
- ♦ Analyse the differences between the two diseases in order to avoid misdiagnosis.
- ♦ Examine state-of-the-art diagnostic methods
- ♦ Develop specialized knowledge in order to carry out the best treatment for each of these diseases





Specific Objectives

Module 1. Osteogenesis

- ♦ Develop knowledge of bone cytology
- ♦ Determine the formation of the structures and the difference between immature bone and genuine bone
- ♦ Examine the hormonal influence on bone development
- ♦ Detail the resistance of the bone to trauma, differentiate between a stable fracture and an unstable fracture by the appearance of the callus in an X-ray.

Module 2. Arthroscopy

- ♦ Describe the history and evolution of arthroscopy in human and veterinary medicine
- ♦ Assess arthroscopy equipment and instruments and their handling
- ♦ Examine the advantages of arthroscopy compared to conventional open surgery
- ♦ Analyse arthroscopy as a method of diagnosing intra-articular pathologies of each joint
- ♦ Provide a rationale for arthroscopy as a method of surgical treatment of intra-articular pathologies
- ♦ Develop arthroscopically assisted surgical techniques for the treatment of periarticular pathologies
- ♦ Establish the contraindications of arthroscopy, assess the complications of this technique and how to resolve them

Module 3. Orthopedic Diseases

- ♦ Examine and analyze each of the diseases
- ♦ Carry out a correct assessment process in order to reach a definitive diagnosis for each of the diseases mentioned
- ♦ Improve therapeutic practice in each of these diseases
- ♦ Assess how best to prevent these diseases
- ♦ Identify early symptoms of diseases for early treatment
- ♦ Methodically analyze the main developmental diseases taking into account differences of age, sex, size, forelimb and hind limb



*Reach the level of knowledge you desire
and learn about Bone Pathophysiology"*

03

Course Management

The teaching staff of the program includes leading experts in Veterinary Traumatology and Orthopedic Surgery, who bring their years of experience to this program. They are world-renowned doctors from different countries with proven theoretical and practical professional experience.





*Our teaching team, experts in Bone Pathophysiology,
will help you achieve success in your profession"*

Management



Dr. Soutullo Esperón, Ángel

- Veterinarian Specialist in Animal Traumatology
- Responsible for the Orthopedic Surgery Service in the Hospitals Fuente el Saz, Privet, Alcor, Velázquez, Valdemoro and Felino Gattos
- Owner of ITECA Veterinary Clinic
- Degree in Veterinary Medicine from the Complutense University of Madrid
- Master's Degree in Surgery and Traumatology from the Complutense University of Madrid
- Diploma of advanced studies in Veterinary Medicine from the Complutense University of Madrid
- Member of GEVO and AVEPA Scientific Committee
-
-
-

Professors

Dr. Borja Vega, Alonso

- ♦ Head of the Surgery and Ophthalmology Department at Vet 2.0 Veterinary Clinic
Founder of Vet 2.0 Veterinary Clinic
- ♦ Degree in Veterinary Medicine from the Alfonso X El Sabio University
- ♦ Master's Degree in Veterinary Ophthalmology, UAB
- ♦ Advanced General Practitioner Certificate (GPAdvCert) in Small Animal Orthopedic Surgery
Practical initiation course in Osteosynthesis, SETOV

Dr. García Montero, Javier

- ♦ Surgeon in the Traumatology and Orthopedics Service at the Cruz Verde Vetsum Veterinary Hospital
Veterinary specialist at El Pinar Veterinary Clinic
- ♦ Degree in Veterinary Medicine from the University of Cordoba
Postgraduate Degree in Traumatology and Orthopedics in Small Animals at the Complutense University of Madrid
- ♦ Postgraduate Degree in Surgery and Anesthesia at the Autonomous University of Barcelona
Member of AO VET Foundation

Dr. Guerrero Campuzano, María Luisa

- ♦ Director of the Veterinary Clinic Petiberia
Bird Veterinarian at Puy du Fou Spain
Veterinarian at Oasis Wildlife Fuerteventura Zoo
- ♦ Animal Technician at the Spanish National Cancer Research Center (CNIO)
Volunteer in the Feline Colony Spay/Neuter Campaign at ALBA Animal Protection Society
Co-author of clinical trials and scientific knowledge pills
- ♦ Degree in Veterinary Medicine from the University Alfonso X El Sabio
Master's Degree in Soft Tissue Surgery and Anesthesia in Small Animals from the

Autonomous University of Barcelona

Master's Degree in Exotic and Wild Animal Medicine and Surgery from the Complutense University of Madrid

Member of AVEPA and GMCAE

Dr. Monje Salvador, Carlos Alberto

- ♦ Head of Endoscopy and Minimally Invasive Surgery Service at ECCOA Veterinary Diagnostics
Veterinary Surgeon in Dopplervet
Responsible for Surgery and Diagnostic Imaging at Gattos Feline Clinical Center
- ♦ Veterinarian at Openvet Veterinary Hospital
Veterinary Surgeon at Unzeta Veterinary Clinic
Degree in Veterinary Medicine from the University of Santiago de Compostela
- ♦ Master's Degree in Endoscopy and Minimally Invasive Surgery in Small Animals from the University of Extremadura
Postgraduate Degree in Small Animal Surgery from the Autonomous University of Barcelona
Member of the Association of Veterinarians Specialists in Small Animals (AVEPA), the Group of Specialists in Feline Medicine AVEPA (GEMFE) and the Group of Veterinary Specialists in Traumatology and Orthopedics (GEVO)

Dr. Flores Galán, José Antonio

- ♦ Head of the Traumatology, Orthopedics and Neurosurgery Service at the Privet Veterinary Hospitals
- ♦ Doctor by the Complutense University of Madrid
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Specialist in Traumatology and Orthopedic Surgery in Companion Animals by the Complutense University of Madrid

04

Structure and Content

The structure of the content has been designed by the best professionals in Veterinary Traumatology and Orthopedic Surgery sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary.



“

This Postgraduate Diploma in Bone Pathophysiology contains the most complete and updated scientific program on the market”

Module 1. Osteogenesis

- 1.1. Biomechanics of Fractures
 - 1.1.1. Bone as a Material
 - 1.1.2. The Role of Bone in Bone Fracture. Mechanical Concepts
- 1.2. Osteogenic Cells
 - 1.2.1. Osteoblasts
 - 1.2.2. Osteocytes
 - 1.2.3. Osteoclasts
- 1.3. The Bone Matrix
- 1.4. The Growth Plate
 - 1.4.1. Organization of the Growth Plate
 - 1.4.2. Blood Supply of the Growth Plate
 - 1.4.3. Structure and Function of the Growth Plate
 - 1.4.4. Cartilaginous Components
 - 1.4.4.1. Reserve Zone
 - 1.4.4.2. Proliferative Zone
 - 1.4.4.3. Hypertrophic Zone
 - 1.4.5. Bone Components (Metaphysis)
 - 1.4.6. Fibrous and Fibrocartilaginous Components
- 1.5. Diaphyseal Bone Formation
- 1.6. Cortical Remodelling
- 1.7. Bone Irrigation
 - 1.7.1. Normal Irrigation of Young Bone
 - 1.7.2. Normal Irrigation of Mature Bone
 - 1.7.2.1. Afferent Vascular System
 - 1.7.2.1.1. Physiology of the Afferent Vascular System
 - 1.7.2.2. Efferent Vascular System
 - 1.7.2.2.1. Physiology of the Efferent Vascular System
 - 1.7.2.3. Intermediate Vascular System of Compact Bone
 - 1.7.2.3.1. Physiology Intermediate Vascular System of Compact Bone
 - 1.7.2.3.2. Bone Cell Activity
- 1.8. Calcium-Regulating Hormones
 - 1.8.1. Parathyroid Hormone
 - 1.8.1.1. Anatomy of the Parathyroid Glands
 - 1.8.1.2. Parathyroid Hormone Biosynthesis
 - 1.8.1.3. Control of Parathyroid Hormone Secretion
 - 1.8.1.4. Biological Action of Parathyroid Hormone
 - 1.8.2. Calcitonin
 - 1.8.2.1. Thyroid C (Parafollicular) Cells
 - 1.8.2.2. Calcitonin Secretion Regulation
 - 1.8.2.3. Biological Action and Physiological Significance of Calcitonin
 - 1.8.2.4. Primary and Secondary Hypercalcitoninemia
 - 1.8.3. Cholecalciferol (vitamin D)
 - 1.8.3.1. Metabolic Activation of Vitamin D
 - 1.8.3.2. Subcellular Mechanisms of Action of Active Vitamin Metabolites
 - 1.8.3.3. Effects of Hormonal Alterations on the Skeleton under Pathological Conditions
 - 1.8.3.4. Vitamin D Deficiency
 - 1.8.3.5. Vitamin D Excess.
 - 1.8.3.6. Primary and Secondary Hyperparathyroidism
- 1.9. Fracture Repair
 - 1.9.1. Bone Response to Trauma
 - 1.9.2. Basic Fracture Repair
 - 1.9.2.1. Inflammatory Phase
 - 1.9.2.2. Repair Phase
 - 1.9.2.3. Remodeling Phase
 - 1.9.2.4. Callus formation
 - 1.9.2.5. Fracture Healing
 - 1.9.2.6. First Intention Repair
 - 1.9.2.7. Second Intention Repair
 - 1.9.2.8. Clinical Union
 - 1.9.2.9. Clinical Union Ranges
- 1.10. Fracture Complications



- 1.10.1. Delayed Union
- 1.10.2. Non-union
- 1.10.3. Bad Union
- 1.10.4. Osteomyelitis

Module 2. Arthroscopy

- 2.1. History of Arthroscopy
 - 2.1.1. Beginning of Arthroscopy in Human Medicine
 - 2.1.2. Beginning of Veterinary Arthroscopy
 - 2.1.3. Dissemination of Veterinary Arthroscopy
 - 2.1.4. Future of Arthroscopy
- 2.2. Advantages and Disadvantages of Arthroscopy
 - 2.2.1. Open Surgery vs. Minimally Invasive Surgery
 - 2.2.2. Economic Aspects of Arthroscopy
 - 2.2.3. Arthroscopy Techniques Training
- 2.3. Arthroscopy Techniques Training.
 - 2.3.1. Endoscopy Equipment
 - 2.3.2. Arthroscopy Specific Material.
 - 2.3.3. Instruments and Implants for Intra-Articular Surgery.
 - 2.3.4. Cleaning, Disinfection and Maintenance of Arthroscopy Instruments.
- 2.4. Elbow Arthroscopy.
 - 2.4.1. Patient Preparation and Positioning.
 - 2.4.2. Joint Anatomy of the Elbow.
 - 2.4.3. Arthroscopic Approach to the Elbow.
 - 2.4.4. Fragmentation of the Medial Coronoid Process.
 - 2.4.5. Osteochondrosis-Osteochondritis Dissecans of the Humeral Condyle.
 - 2.4.6. Medial Compartment Syndrome.
 - 2.4.7. Other Pathologies and Indications for Elbow Arthroscopy.
 - 2.4.8. Contraindications and Complications in Elbow Arthroscopy.
- 2.5. Shoulder Arthroscopy

- 2.5.1. Patient Preparation and Positioning.
- 2.5.2. Joint Anatomy of the Shoulder.
- 2.5.3. Lateral and Medial Shoulder Approach with the Limb Hanging.
- 2.5.4. Osteochondrosis-Osteochondritis Shoulder
- 2.5.5. Bicipital Tendinitis
- 2.5.6. Shoulder Instability
- 2.5.7. Other Pathologies and Indications for Shoulder Arthroscopy.
- 2.5.8. Contraindications and Complications in Shoulder Arthroscopy.
- 2.6. Knee Arthroscopy.
 - 2.6.1. Patient Preparation and Positioning.
 - 2.6.2. Joint Anatomy of the Knee.
 - 2.6.3. Arthroscopic Approach to the Knee.
 - 2.6.4. Cranial Cruciate Ligament Injury.
 - 2.6.5. Menisopathies.
 - 2.6.6. Osteochondrosis-Osteochondritis Dissecans.
 - 2.6.7. Other Pathologies and Indications for Knee Arthroscopy.
 - 2.6.8. Contraindications and Complications in Knee Arthroscopy.
- 2.7. Hip Arthroscopy
 - 2.7.1. Patient Preparation and Positioning.
 - 2.7.2. Approach to the Hip.
 - 2.7.3. Pathologies and Indications for Hip Arthroscopy.
 - 2.7.4. Contraindications and Complications in Hip Arthroscopy.
- 2.8. Tarsal Arthroscopy
 - 2.8.1. Articular Anatomy of the Tarsus.
 - 2.8.2. Preparation and Positioning of the Patient.
 - 2.8.3. Arthroscopic Approach to the Tarsus.
 - 2.8.4. Pathologies and Indications for Tarsal Arthroscopy.
 - 2.8.5. Contraindications and Complications in Tarsal Arthroscopy.
- 2.9. Carpal Arthroscopy.

- 2.9.1. Anatomy of the Carpal Joint.
- 2.9.2. Preparation and Positioning of the Patient.
- 2.9.3. Arthroscopic Approach to the Carpus.
- 2.9.4. Pathologies and Indications for Carpal Arthroscopy.
- 2.9.5. Contraindications and Complications in Carpal Arthroscopy.
- 2.10. Arthroscopy-Assisted Surgery
 - 2.1.10.1. Bone Anchors and Other Implants for Joint Stabilisation Surgery.
 - 2.1.10.2. Arthroscopically Assisted Shoulder Stabilisation Surgery.

Module 3. Orthopedic Diseases

- 3.1. Hip Dysplasia
 - 3.1.1. Definition
 - 3.1.2. Etiology
 - 3.1.3. Pathogenesis.
 - 3.1.4. Clinical Signs
 - 3.1.4.1. Diagnosis
 - 3.1.4.2. Treatment
 - 3.1.5. Traumatic Dislocation of the Hip
- 3.2. Anterior Cruciate Ligament or Cranial Ligament Rupture I
 - 3.2.1. Definition
 - 3.2.2. Etiology
 - 3.2.3. Pathogenesis.
 - 3.2.4. Clinical Signs
 - 3.2.5. Diagnosis
 - 3.2.6. Therapy
 - 3.2.7. Meniscal Pathology
- 3.3. Anterior Cruciate Ligament or Cranial Ligament Rupture II
 - 3.3.1. Surgical Treatment. Techniques
- 3.4. Patella Dislocation
 - 3.4.1. Diagnosis
 - 3.4.2. Grades of Patellar Dislocation
 - 3.4.3. Surgical Procedures that Counteract Forces

- 3.4.4. Surgical Procedures that Counteract Forces
- 3.4.5. Prognosis
- 3.5. Elbow Dysplasia
 - 3.5.1. Definition
 - 3.5.2. Etiology
 - 3.5.3. Pathogenesis.
 - 3.5.4. Clinical Signs
 - 3.5.5. Diagnosis
 - 3.5.6. Treatment
 - 3.5.7. Elbow Dislocation
- 3.6. Radial Curvature and other Bone Deformities
 - 3.6.1. Definition
 - 3.6.2. Etiology
 - 3.6.3. Pathogenesis.
 - 3.6.4. Clinical Signs
 - 3.6.5. Diagnosis
 - 3.6.6. Treatment
- 3.7. Orthopedic Diseases of Exotic Animals
 - 3.7.1. Reptile Diseases
 - 3.7.2. Bird Diseases
 - 3.7.3. Small Mammalian Diseases
- 3.8. Wobbler Syndrome
 - 3.8.1. Definition
 - 3.8.2. Etiology
 - 3.8.3. Pathogenesis.
 - 3.8.4. Clinical Signs
 - 3.8.5. Diagnosis
 - 3.8.6. Treatment
 - 3.8.7. Lumbosacral Instability.
 - 3.8.7.1. Definition
 - 3.8.7.2. Etiology
 - 3.8.7.3. Pathogenesis.

- 3.8.7.4. Clinical Signs
- 3.8.7.5. Diagnosis
- 3.8.7.6. Treatment
- 3.9. Other Pathologies
 - 3.9.1. Osteochondrosis - Osteochondritis Dissecans (OCD), Scapulohumeral Instability, Panosteitis, Hypertrophic Osteodystrophy, Craniomandibular Osteopathy
 - 3.9.1.1. Definition
 - 3.9.1.2. Etiology
 - 3.9.1.3. Pathogenesis.
 - 3.9.1.4. Clinical Signs
 - 3.9.1.5. Diagnosis
 - 3.9.1.6. Treatment
 - 3.9.2. LeggPerthes Disease
 - 3.9.2.1. Definition
 - 3.9.2.2. Etiology
 - 3.9.2.3. Pathogenesis.
 - 3.9.2.4. Clinical Signs
 - 3.9.2.5. Diagnosis
 - 3.9.2.6. Treatment
 - 3.9.3. Hypertrophic Osteodystrophy
 - 3.9.4. Hypertrophic Osteoarthropathy.
 - 3.9.5. Tendinopathies: Contracture of Supraspinatus, Quadriceps, Carpal Flexor Tendon
- 3.10. Bone Tumors
 - 3.10.1. Definition
 - 3.10.2. Etiology
 - 3.10.3. Pathogenesis.
 - 3.10.4. Clinical Signs
 - 3.10.5. Diagnosis
 - 3.10.6. Treatment

05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

“

*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
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 course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

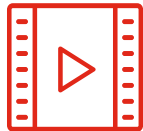
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

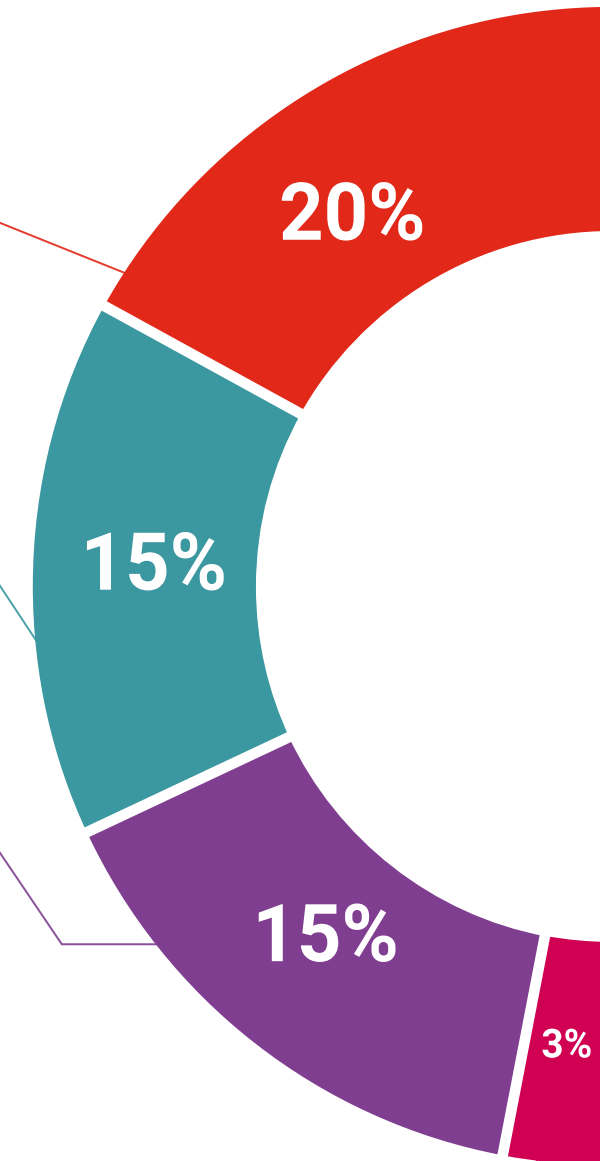
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

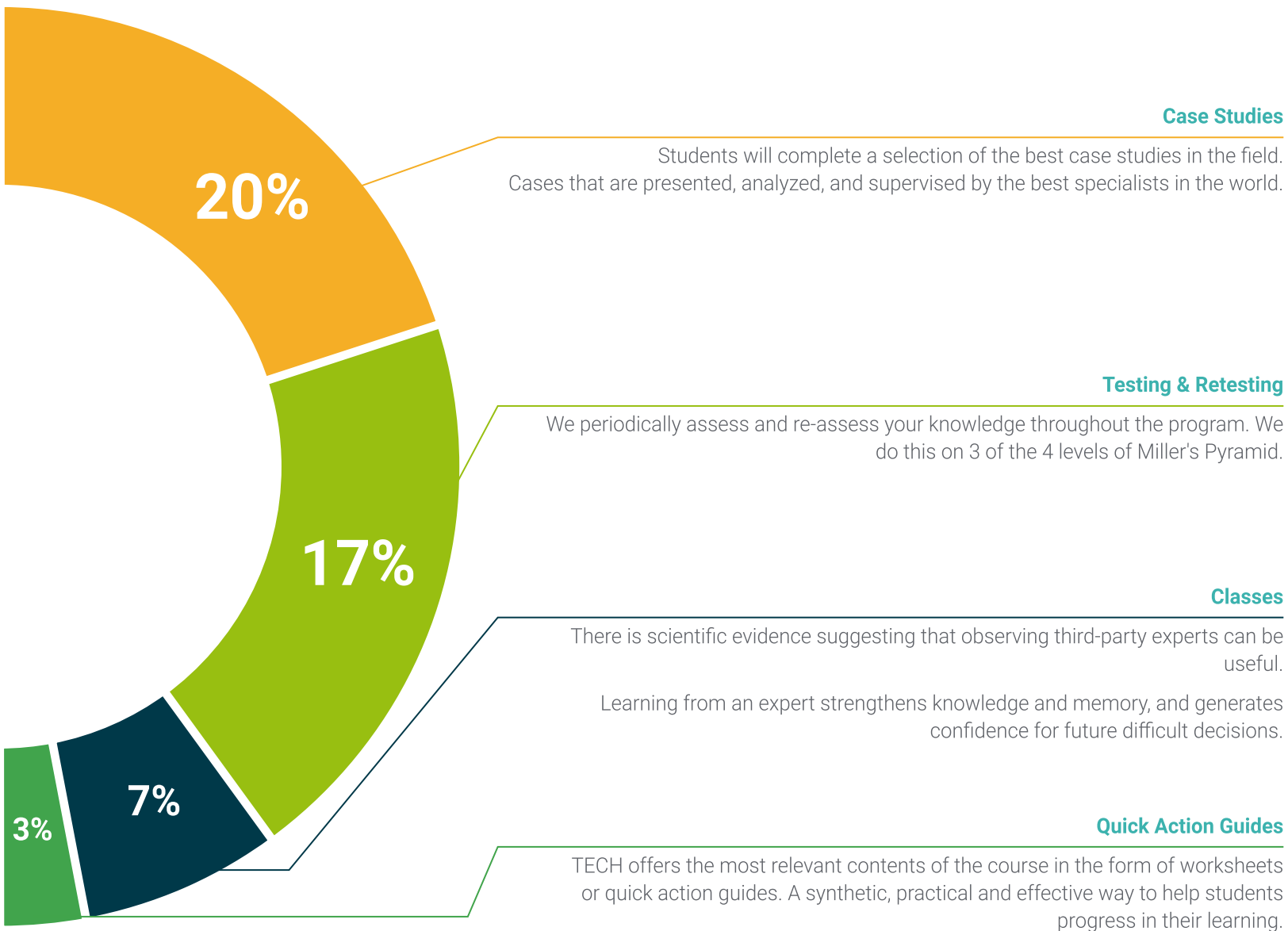
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06 Certificate

The Postgraduate Diploma in Bone Pathophysiology guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



“

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

This private qualification will allow you to obtain a **Postgraduate Diploma in Bone Pathophysiology** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University, is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

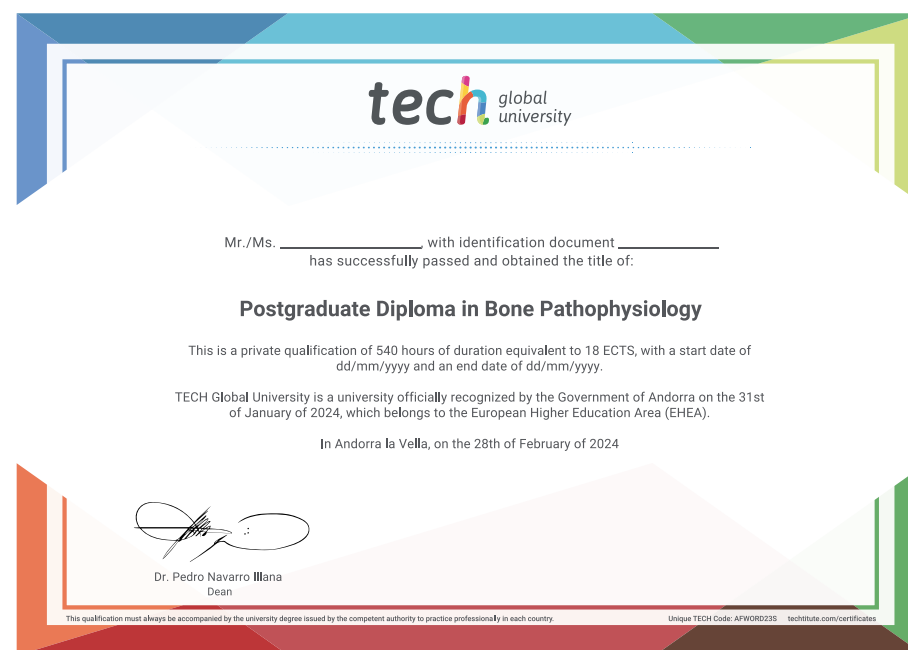
This **TECH Global University private qualification**, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Bone Pathophysiology**

Modality: **online**

Duration: **6 months**.

Accreditation: **18 ECTS**



futuro
salud confianza personas
educación información tutores
garantía acreditación enseñanza
instituciones tecnología aprendizaje
comunidad compromiso
atención personalizada innovación
conocimiento presente calidad
desarrollo web form
aula virtual idiomas



Postgraduate Diploma Bone Pathophysiology

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

Postgraduate Diploma Bone Pathophysiology

