



Postgraduate Diploma

Rheumatic Pain in the Geriatric Patient

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-rheumatic-pain-geriatric-patient

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tech 06 | Introduction

From osteoarthritis, microcrystalline arthropathies, degenerative and traumatic pathologies to musculoskeletal infections may have a higher incidence in geriatric patients. The common nexus of all these diseases is the painful manifestation, which can facilitate their diagnosis and specific treatment.

The increase in the population affected by these conditions poses a challenge both in the techniques for their detection and evaluation and in their approach, especially in a population group that is characterized by being pharmacologically treated for previous pathologies. A scenario that puts Rheumatology specialists to the test, thus motivating the creation of this Postgraduate Diploma in Rheumatic Pain in the Geriatric Patient.

This is an intensive program that will allow the graduate to deepen from an integral vision in the physiopathology of pain and the different therapeutic options and existing treatments for the improvement of the painful experience. In addition, during the 450 teaching hours of this training, you will delve into the most frequent musculoskeletal diseases and manifestations of systemic pathologies.

Likewise, thanks to the Relearning system, based on the reiteration of key concepts throughout the academic itinerary, students will be able to reduce the hours of memorization and consolidate the concepts addressed.

Undoubtedly, a unique opportunity to update through a university degree that facilitates self-management of study and access to the program at any time of the day, through a cell phone, tablet or computer with internet connection. An ideal academic option for medical professionals who are looking for a first class program, according to their needs.

This **Postgraduate Diploma in Rheumatic Pain in the Geriatric** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Rheumatology
- 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
- Its special emphasis on innovative methodologies
- 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



A university degree that is compatible with your schedule and with your goals of updating your knowledge in Rheumatic Pain in the Geriatric Patient"



With this degree, it explores the most frequent fractures in the emergency and consultation of geriatric patients"

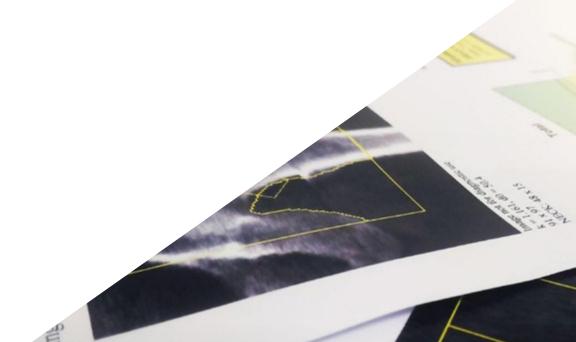
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

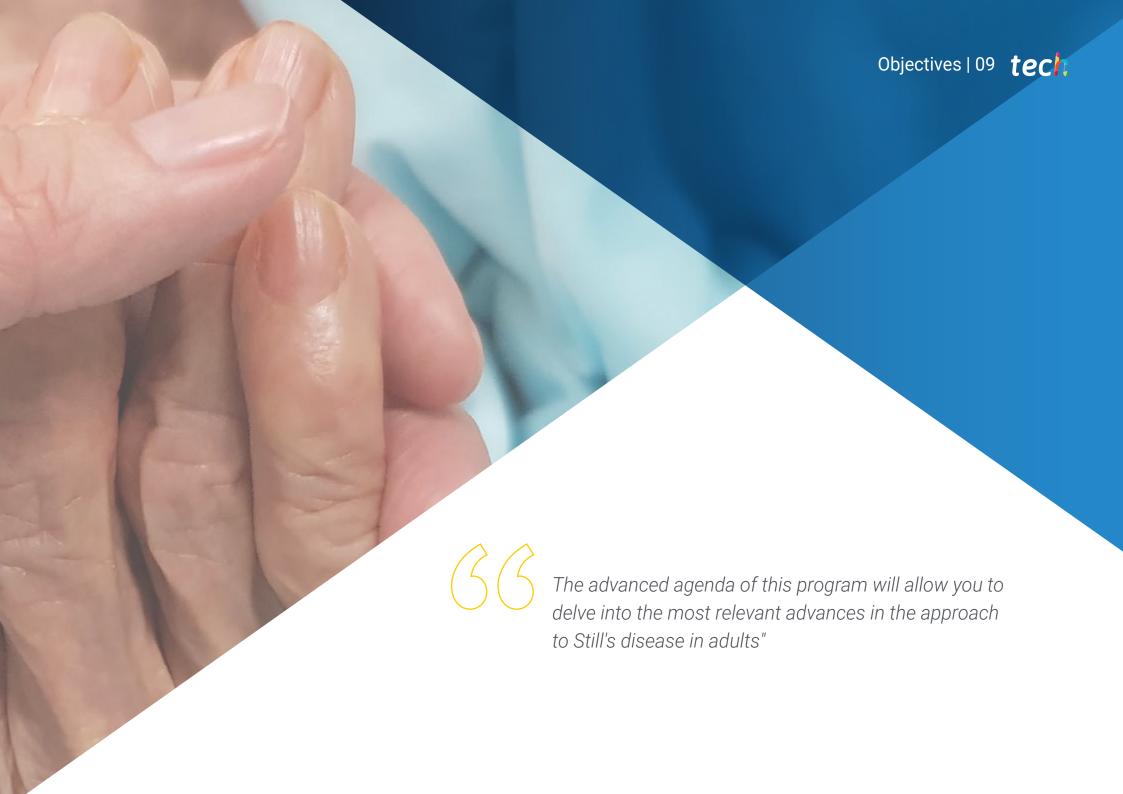
The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Thanks to the Relearning method, you will be able to reduce the hours of study and consolidate the concepts covered in this degree.

An academic option that will take you from conventional radiography to nuclear medicine for the diagnosis of osteoarthritis.







tech 10 | Objectives



General Objectives

- Deepen in the processes of aging, its clinical, diagnostic and prognostic implications
- Investigate the specific biological and physiological determinants of geriatric patients
- Learn more about the reasons why pathologies manifest themselves differently in geriatric patients, as well as the pharmacological characteristics that condition their treatments
- Update knowledge on the biopsychosocial determinants related to the aging process
- Promote comprehensive and holistic care in geriatric patients with rheumatic pathologies, whether measured by the immune system, bone metabolism, paraneoplastic or degenerative manifestations



Delve into the current pharmacology used in hepatic and rheumatic diseases with cutaneous involvement"





Module 1. Pain of Rheumatic Origin in the Geriatric Patient

- Strengthen anatomical and physiological knowledge to ensure an update on the mechanisms and pathways by which pain is produced
- Integrate the different types of pain for each of the situations of routine clinical practice
- Update knowledge on the basics of pain to enable the participant to perform the most appropriate treatment for each case
- Deepen in the indication of the different specific therapies for pain management

Module 2. Degenerative and infectious pathology

- Integrate the manifestations of degenerative and infectious pathology of the locomotor system in the geriatric patient broken down by anatomical structures
- Be aware of the most current procedures in the approach to degenerative and infectious pathologies of the locomotor system in the geriatric population
- Identify the most advanced pharmacological and non-pharmacological therapeutic measures in each of the situations that may occur in degenerative and/or infectious pathologies of the locomotor system

Module 3. Musculoskeletal Manifestations of Systemic Pathologies of the Elderly (IR, Hepatic I, Anemias, Parathyroid Pathology) and Other Metabolic Atroparias

- Delve into the specific characteristics of each of the pathologies included with their repercussions in the geriatric age
- Analyze the approach to immune-mediated systemic diseases (vasculitis, myopathies and others) in the geriatric population
- Identify the problems and limitations presented by the different current classification criteria for immune-mediated systemic diseases (vasculitis, myopathies, and others) in geriatric patients
- Address current pharmacological and non-pharmacological therapeutic measures in each of the situations that may arise in systemic immune-mediated diseases





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Management



Dr. García Martos, Alvaro

- Rheumatology Specialist at the Tajo University Hospital
- Physician specializing in Rheumatology at the University Hospital 12 de Octubre
- Associate Professor of Rheumatology at the University Alfonso X, El Sabio
- Research Sufficiency by the Complutense University of Madrid
- Degree in Medicine from the Cantabria University
- Master's Degree in Rheumatic Diseases mediated by the Immune System, Rey Juan Carlos University and the Spanish Society of Rheumatology
- EFSUMB Certification: Musculoskeletal Ultrasound level 1
- Levels A and B of musculoskeletal ultrasound of the Spanish Society of Sports Medicine

Professors

Dr. Sánchez Martín, Julio

- Assistant Physician of Rheumatology, Marques de Valdecilla University Hospital
- Rheumatology Specialists at the 12 de Octubre University Hospital
- Family and Community Physician at the Virgen de La Concha Hospital
- Degree in Medicine and Surgery from the University of Salamanca
- Official certificate of expert in infiltrative pain therapy by the Swiss Pain Society
- Official expert certificate in musculoskeletal ultrasound from the Swiss Society for Musculoskeletal Ultrasound and SER
- Member of: Spanish Society of Rheumatology, Spanish Society of Pain Medicine (SEMDOR), Spanish Pain Society (SED), ECOSER Working Group of the Spanish Society of Rheumatology

Dr. Parra Grande, Francisco Javier

- Area Specialist Physician at Tajo Hospital
- Physician at the Toledo Integral Medical Institute
- Area Specialist Physician at Principe of Asturias University Hospital, Alcala of Henares
- Specialist in Orthopedic and Trauma Surgery
- Physician at the Virgen del Mar Arthroscopy Unit
- Degree in Medicine from the Autonomous University Madrid
- Postgraduate Certificate of Advanced Studies from the Complutense University of Madrid
- Certificate of professional update in Orthopedic Surgery and Traumatology by the Spanish Society of Orthopedic Surgery and Traumatology

Dr. De Santiago Moraga, Mar

- Spine Unit Physician at the Hospital del Tajo
- Specialist in Orthopedic and Traumatologic Surgery
- Degree in Medicine from the Complutense University of Madrid
- Master's Degree in Research and Specialized Treatment of Pain by the University of Valencia

Dr. Cortijo Garrido, Laura

- Physical Medicine and Rehabilitation Physician at the Tajo University Hospital
- Assistant Specialist at CROSECON
- Assistant Specialist Physician at the Gorliz Hospital
- Specialist in Physical Medicine and Rehabilitation at the Foundation Alcorcon University Hospital
- Academic Tutor of Internships in the Degree of Medicine of the Alfonso X El Sabio University
- Honorary Collaborator of the Rey Juan Carlos University
- Degree in Medicine from the Autonomous University Madrid
- Official Master's Degree in Epidemiology and Public Health from the Rey Juan Carlos University
- Expert in Musculoskeletal Ultrasound by the Francisco de Vitoria University
- Member of: Knowledge Management and Continuing Education Committee of the Tajo University Hospital, Spanish Society of Physical Medicine and Rehabilitation

Dr. Álvarez Collado, Carlos Juan

- Physician of the Arthroscopy and Sports Medicine Unit of the Tajo University Hospital
- Medical Specialist in Orthopedic Surgery and Traumatology
- Degree in Medicine from the Complutense University of Madrid
- Master's Degree in Medical and Clinical Management
- Own Master's Degree of the National University of Distance Education in collaboration with the National School of Health
- Master's Degree in Orthopedic Surgery and Traumatology by CEU Cardenal Herrera University

Dr. Lavilla Villar, Patricia

- Assistant Physician in the Rheumatology Department at the General University Hospital of Villalba
- · Assistant Physician in Rheumatology at the Zarzuela University Hospital
- · Assistant Physician, Rheumatology, 12 de Octubre University Hospital of Madrid
- Researcher at the Biomedical Research Foundation 12 de Octubre of Madrid
- Collaborating lecturer Alfonso X El Sabio University
- Degree in Medicine from the Oviedo University





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Module 1. Pain of Rheumatic Origin in the Geriatric Patient

- 1.1. Pathophysiology of Pain
 - 1.1.1. Pain Transmission Nociceptors Inflammatory Mediators
 - 1.1.2. Peripheral Sensitization, Nociceptive Modulation
 - 1.1.3. Pathophysiology of Neuropathic Pain
- 1.2. Pain Anatomy
 - 1.2.1. Anatomical Substrate of Nociceptive Transmission
- 1.3. Epidemiology of Pain in Geriatric Patients
 - 1.3.1. Factors Involved in the Pain
- 1.4. Treatment: Prevention and Modification of Harmful Habits
 - 1.4.1. Quality of Life Assessment Measures
 - 1.4.2. Functional Assessment, Cognitive and Psychological Aspects
 - 1.4.3. Prevention of Sedentary Lifestyles and Inactivity Health education
- 1.5. Non-Pharmacological Treatment: Interventions in the Biopsychosocial Field
 - 1.5.1. Initial Clinical Evaluation
 - 1.5.2. Health Education and General Recommendations
 - 1.5.3. Symptomatic Treatment: Kinesitherapy and Electrotherapy
- 1.6. Physical Therapy for Degenerative Pathology
 - 1.6.1. Electrotherapy, Kinesiotherapy and Hydrotherapy
 - 1.6.2. Occupational Therapy, Orthoses and Technical Aids
 - 1.6.3. Evidence-Based Medicine
- 1.7. Physical Therapy for Inflammatory Pathology
 - 1.7.1. Physical Therapies and Kinesitherapy
 - 1.7.2. Occupational Therapy, Orthoses and Technical Aids
 - 1.7.3. Evidence-Based Medicine
- 1.8. Pharmacological Treatment
 - 1.8.1. Therapeutic Arsenal and its Indications
 - 1.8.2. News in the Clinic
- 1.9. Interventional Techniques in the Geriatric Patient
 - 1.9.1. Axial Interventionism
 - 1.9.2. Peripheral Interventionism
- 1.10. Regenerative Medicine in the Treatment of Pain in the Geriatric Population
 - 1.10.1. Platelet Rich Plasma
 - 1.10.2. Mesenchymal Stem Cells





Structure and Content | 19 tech

Module 2. Degenerative and infectious pathology

- 2.1. Arthrosis
 - 2.1.1. Etiopathogenesis. Primary and Secondary Arthrosis
 - 2.1.2. Role of Non-Bony Structures in Osteoarthritis
 - 2.1.3. Molecular Biology of Osteoarthritis
- 2.2. Diagnostic Techniques for Osteoarthritis
 - 2.2.1. Reality of the Techniques we Request in the Practice
 - 2.2.2. From Conventional Radiography to Nuclear Medicine
 - 2.2.3. Other Techniques
- 2.3. Musculoskeletal Deterioration Associated with Aging Fractures in the Elderly
 - 2.3.1. Age-associated Musculoskeletal Pathophysiology: Sarcopenia and Osteopenia
 - 2.3.2. Epidemiology and Socioeconomic Cost
 - 2.3.3. Most Frequent Fractures in the Emergency and Consultation Room
- 2.4. Pelvis and Hip Fractures in the Elderly
 - 2.4.1. Epidemiology Socioeconomic Implications and Public Health Issues
 - 2.4.2. Diagnosis and Classification
 - 2.4.3. Treatment
- 2.5. Degenerative and Traumatic Pathology of the Elderly Spine
 - 2.5.1. Characteristics and Pathophysiology of Aging at the Spinal Level
 - 2.5.2. Fractures Specific to Geriatric Age
 - 2.5.3. Degenerative Disc, Joint and Canal Pathology
 - 2.5.4. Therapy Options
- 2.6. Other Arthropathies
 - 2.6.1. Neuropathic Arthropathy
 - 2.6.2. Hemorrhagic Arthropathy
 - 2.6.3. Other Arthropathic Disorders
- 2.7. Overview of Osteoarthritis Treatment
 - 2.7.1. Conservative Treatment
 - 2.7.2. Surgical Treatment with Joint Preservation
 - 2.7.3. Prosthetic Treatment

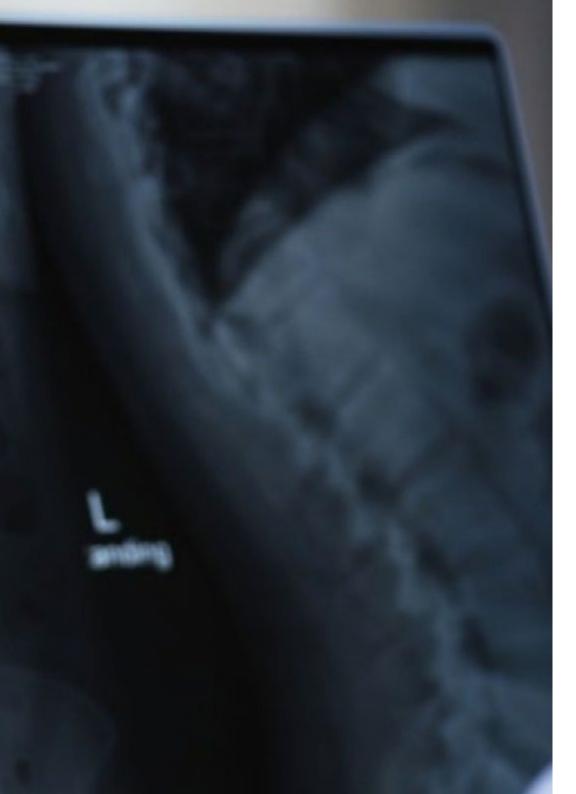
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- 2.8. Musculoskeletal Infections
 - 2.8.1. Soft Tissue Infections
 - 2.8.2. Bone Infections: Osteomyelitis
 - 2.8.3. Joint Infections
 - 2.8.4. Implant Infections
- 2.9. Soft Tissue Injuries
 - 2.9.1. Traumatic and Inflammatory Muscle Injuries
 - 2.9.2. Degenerative, Traumatic and Inflammatory Tendon Injuries
 - 2.9.3. Synovial Bursa Pathology
- 2.10. Joint Trauma
 - 2.10.1. Contusions
 - 2.10.2. Sprains
 - 2.10.3. Dislocation

Module 3. Musculoskeletal Manifestations of Systemic Pathologies of the Elderly (IR, Hepatic I, Anemias, Parathyroid Pathology) and Other Metabolic Atroparias

- 3.1. Microcrystalline Arthropathies: Characteristics
 - 3.1.1. Epidemiology
 - 3.1.2. Pathogenesis
 - 3.1.3. Types
- 3.2. Microcrystalline Arthropathies: Diagnosis
 - 3.2.1. Pathophysiology
 - 3.2.2. Differential Diagnosis
- 3.3. Microcrystalline Arthropathies: Treatment
 - 3.3.1. Treatment
 - 3.3.2. Prevention of New Episodes
- 3.4. Renal Diseases and their Musculoskeletal Manifestations
 - 3.4.1. Epidemiology
 - 3.4.2. Physiopathogenesis
 - 3.4.3. Treatment
- 3.5. Liver Diseases and their Musculoskeletal Manifestations
 - 3.5.1. Musculoskeletal Manifestations of HCV
 - 3.5.2. Cryoglobulinemia





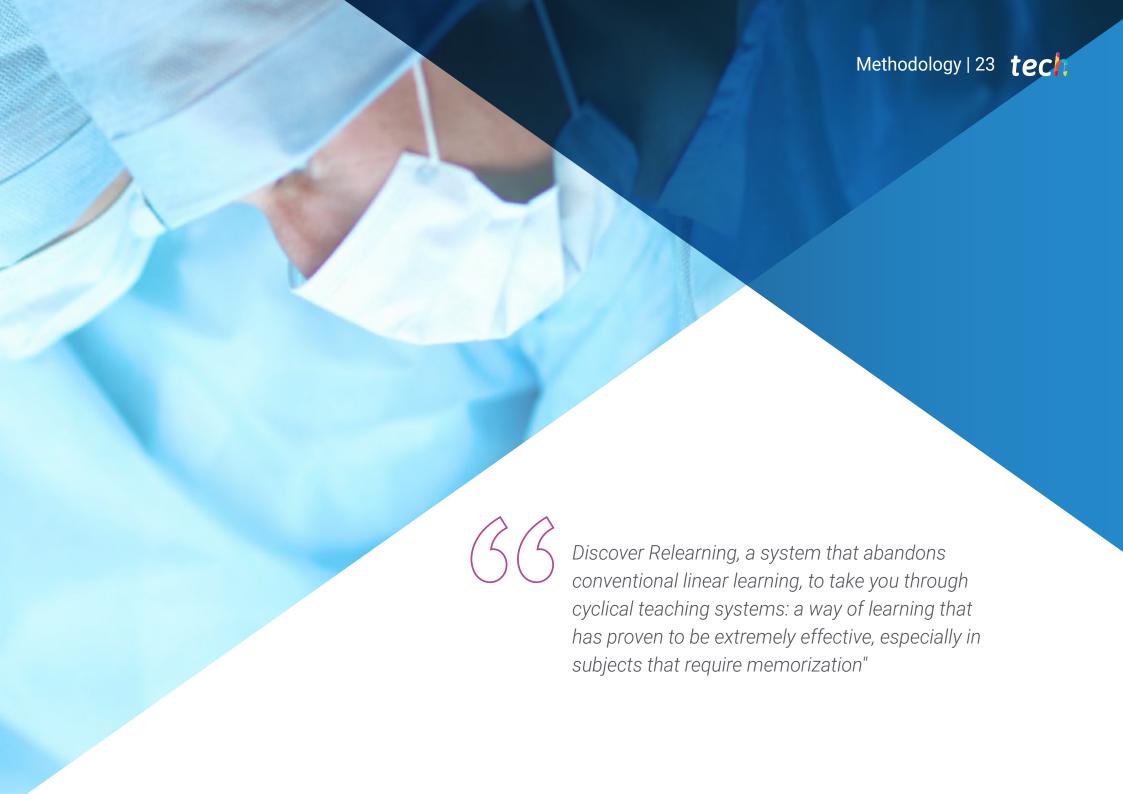
Structure and Content | 21 tech

- 3.6. Non-Neoplastic Hematologic Diseases and Their Musculoskeletal Manifestations
 - 3.6.1. Multiple Myeloma Multiple Myeloma Monoclonal Gammopathy of Uncertain Significance (MGUS)
 - 3.6.2. Hemophilia
- 3.7. Endocrinology Diseases and Musculoskeletal Manifestations
 - 3.7.1. Diabetes Mellitus
 - 3.7.2. Thyroid Disease
- 3.8. Wilson's Disease, Hemochromatosis, Mucopolysaccharide, Hemochromatosis, Mucopolysaccharide
 - 3.8.1. Wilson's Disease: Etiopathogenesis, Clinical Features, Diagnosis and Treatment
 - 3.8.2. Hereditary Hemochromatosis: Etiopathogenesis, Clinical Features, Diagnosis and Treatment
 - 3.8.3. Mucopolysaccharidosis: Etiopathogenesis, Clinical Features, Diagnosis and Treatment
- 3.9. Rheumatic Diseases with Skin Involvement: Panniculitis
 - 3.9.1. Epidemiology
 - 3.9.2. Pathophysiology
 - 3.9.3. Treatment
- 3.10. Enteropathic Arthritis
 - 3.10.1. Coeliac Disease
 - 3.10.2. Collagenous Colitis
 - 3.10.3. Whipple's Disease



Give an update on the main therapeutic options in degenerative and traumatic pathology of the elderly spine"





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At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. 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, trying to recreate the real conditions in the physician'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:

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.





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.

Professionals 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 | 27 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 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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 28 | 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.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical 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 evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts.

The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.









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This program will allow you to obtain your **Postgraduate Diploma in Rheumatic Pain in the Geriatric Patient** 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 Rheumatic Pain in the Geriatric Patient

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



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

Postgraduate Diploma in Rheumatic Pain in the Geriatric Patient

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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



^{*}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.

health confidence people
leducation information tutors
guarantee accreditation teaching
institutions technology learning



Postgraduate Diploma Rheumatic Pain in the Geriatric Patient

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

