

Postgraduate Certificate

Physiotherapy, Pain and Aging





Postgraduate Certificate

Physiotherapy, Pain and Aging

Course Modality: Online

Duration: 2 months.

Certificate: TECH Technological University

Official N° of hours:175 h.

Website: www.techtute.com/physiotherapy/postgraduate-certificate/physiotherapy-pain-aging

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 14

04

Structure and Content

p. 18

05

Methodology

p. 22

06

Certificate

p. 30

01

Introduction

The treatment of pain in geriatric patients finds in physiotherapy an effective and adaptable way of working in multiple situations and patients. Supported by the most innovative advances in this field, this course will provide you with the most comprehensive knowledge on the subject, with a high quality multidisciplinary and advanced vision.



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Learn quickly and efficiently how to treat pain in geriatric patients with the support of the most innovative methods in this type of intervention"

The treatment of pain in geriatric patients is nourished by the advances and updates that are appearing in this field of work. The physiotherapist needs to keep his competences in line with them, in order to achieve the improvement that the patients' quality of life gets, when the pain is effectively controlled.

To this end, the professional must assess and explore the patient's resistance and physiological reserves in order to establish the appropriate framework for action, home care, residential care, day care centers, social centers or private clinics.

It is therefore essential to know the tools of physiotherapy and the appropriateness of their application in each case, such as active exercise, manual therapy and electrotherapy. Being able to work in an interdisciplinary team, with appropriate communication tools, understanding the concept of person-centered care, having the most up-to-date knowledge of support devices and even the support of current technology can be key to success in physical therapy treatment.

This **Postgraduate Certificate in Physiotherapy, Pain and Aging** offers you the characteristics of a program of high scientific, teaching and technological level.

These are some of its most notable features:

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



*Get ahead of the curve in
physiotherapy treatment of pain in the
elderly"*

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A study that will cover the different pathologies and situations of intervention with geriatric patients with a focus on the practical reality of working with them"

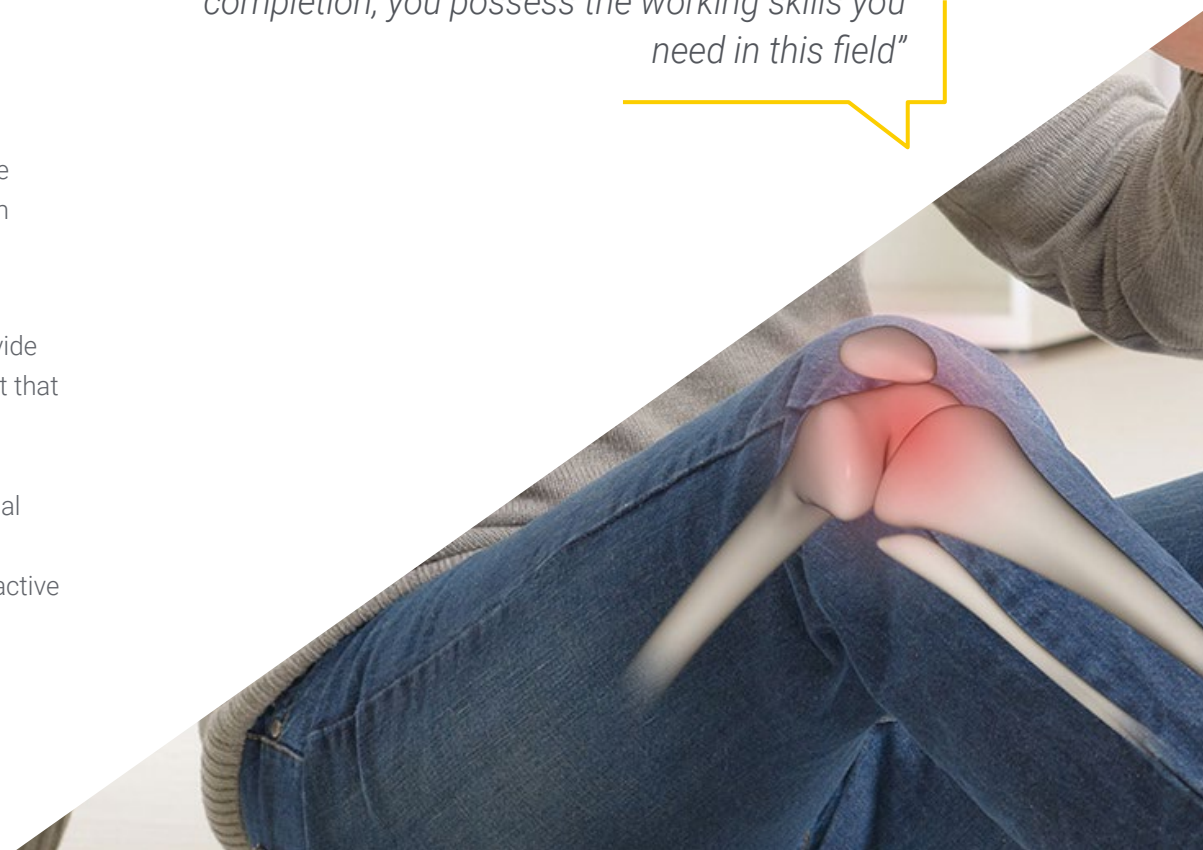
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 training programmed to train 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 academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

"A methodological approach supported by teaching techniques proven for their effectiveness to allow you to learn in a dynamic and efficient way"

"With the support of high-quality audiovisual systems, the purpose of this course is that you not only acquire the knowledge, but that, upon completion, you possess the working skills you need in this field"



02 Objectives

Acquire the most current knowledge in the treatment of pain in different pathologies and conditions in geriatric patients, with the quality of a high-level program. The objective is to generate specialized knowledge in the student by creating a well-structured basis to identify the clinical signs associated with the different needs and developments, providing a broad and contextual view of the activity of this field today.





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A highly efficient course, capable of converting the theory you will learn into real intervention competences”



General Objective

- Develop a critical and reasoned attitude, based on the most recent scientific evidence, towards physiotherapeutic diagnosis in the elderly patient and to be able to apply an adequate treatment in order to reduce functional impotence, fragility and deterioration, thus favoring an improvement of physical and mental health in old age



Update your knowledge through the program in physiotherapy, pain and aging"





Specific Objectives

- ◆ Explain the anatomy and physiology of pain transmission.
- ◆ Define the different types of pain
- ◆ Describing pain and aging from a biopsychosocial paradigm
- ◆ Define the different pain syndromes in geriatrics
- ◆ Explain how to perform a proper pain assessment
- ◆ Explain the pharmacological treatment of pain in the geriatric patient
- ◆ Explain the physiotherapeutic treatment of the geriatric patient

03

Course Management

The program includes in its teaching staff reference specialists in physiotherapy and geriatrics, who pour into this training the experience of their work. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner.





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Learn from the best teachers, specialists in this field of work, in a professional growth experience of great value for your CV"

Management



Dr. Castillo, Juan Ignacio

- ♦ Chief of Physical Medicine and Rehabilitation Service. 12 de Octubre Hospital. Madrid
- ♦ Associate Professor Universidad Complutense de Madrid. Faculty of Medicine. 2016
- ♦ Collaborating Professor at Universidad Complutense de Madrid. 2011-2016
- ♦ Teaching coordinator in continuing education courses at the Madrid Regional Ministry of Health: "Tertiary prevention in chronic cardiopathic patients" Cardiac Rehabilitation"
- ♦ Master's Degree in Cardiac Rehabilitation. SEC-UNED
- ♦ Master in Disability Assessment Autonomous University Madrid
- ♦ Master Child Disability. Complutense University of Madrid
- ♦ Doctorate Course: Neurosciences University of Salamanca.
- ♦ Degree in Medicine and Surgery. University of Salamanca
- ♦ Coordinator of continuing education of the Spanish Society of Cardiology in Exercise Testing with Oxygen Consumption

Co-Direction



Ms. García Fontalba, Irene

- ♦ Manager and physiotherapist at the private physiotherapy center Cal Moure'S, born with the aim of treating limitations of daily living skills due to pain or pathologies associated with aging
- ♦ Member of the Girona Territorial Section of the Association of Physiotherapists of Catalonia
- ♦ Creator of the blog fisios y otras historias.
- ♦ Psychology undergraduate student
- ♦ Coordinator the Group of social networks of the group of professionals for the promotion of health in Girona (2015-2017)
- ♦ More than ten years working in geriatric pathology and processes involving pain at home and in private practice



Professors

Ms. Díaz Zamudio, Delia

- ♦ Resident Intern of Rehabilitation and Physical Medicine in the Rehabilitation Service of the University Hospital 12 de Octubre
- ♦ Adjunct specialist in the Rehabilitation Service of the University Hospital 12 de Octubre, Madrid
- ♦ Honorary Collaborator of the Department of Physical Medicine and Rehabilitation and Hydrology at the Hospital 12 de Octubre, Complutense University of Madrid
- ♦ Degree in Medicine and Surgery. Faculty of Medicine. University of Seville
- ♦ FEA of Rehabilitation and Physical Medicine, Rehabilitation Service, University Hospital Denia, Alicante in 2013.
- ♦ FEA of Rehabilitation and Physical Medicine, Rehabilitation Service of the University Hospital Alto Deba, Mondragón, San Sebastián in 2012.

Dr. Cuesta Gascón, Joel

- ♦ Resident of Physical Medicine and Rehabilitation at the University Hospital 12 de Octubre, Madrid
- ♦ Teacher of the Specialization Course in Neuropathic Pain at La Princesa Hospital. 2019
- ♦ Organizer and speaker at "See you on the 12th". "Fundamentals and Physiology of Sport". 2020
- ♦ Speaker at " AMIR 2020 Academy postMIR Conference" on the specialty of Physical Medicine and Rehabilitation
- ♦ Master's Degree in Clinical Medicine, Francisco de Vitoria University, Madrid
- ♦ Medical Degree from the University Camilo José Cela, Madrid
- ♦ Expert in musculoskeletal ultrasonography

Ms. González García, María Dolores

- ♦ Head of the Neurological Rehabilitation Service, Hospital 12 Octubre, Madrid
- ♦ Area Specialist Physician, Doce de Octubre Hospital, Madrid
- ♦ Degree in Medicine and Surgery by the University of Alcalá. Alcalá de Henares, Madrid
- ♦ Specialist in Physical Medicine and Rehabilitation
- ♦ Completion of the specialty of Physical Medicine and Rehabilitation as resident intern (MIR) in the Rehabilitation Service at the University Hospital 12 de Octubre, Madrid, 2002-2006

Ms. Pino Giráldez, Mercedes

- ♦ Assistant Rehabilitation Physician at University Hospital Doce de Octubre, Madrid
- ♦ Specialist in Physical Medicine and Rehabilitation. Guadalajara University Hospital
- ♦ Specialist in Childhood Disability by Complutense University of Madrid
- ♦ Degree in Medicine and Surgery by Alcalá de Henares University. Madrid
- ♦ MIR Physical Medicine and Rehabilitation
- ♦ Medical Rehabilitation Specialist at the Jiménez Díaz Foundation Hospital. 2012
- ♦ Assistant Rehabilitation Physician at Hospital Rey Juan Carlos I, Madrid. 2013
- ♦ Assistant Rehabilitation Physician at Hospital de Torrejón de Ardoz. 2014
- ♦ Assistant Rehabilitation Physician at the University Hospital of Guadalajara. 2014

Ms. García, Sofía

- ♦ Doctor Specialist - Physical Medicine and Rehabilitation. Pediatric Rehabilitation Department. 12 de Octubre University Hospital, Madrid
- ♦ Doctor Specialist - Physical Medicine and Rehabilitation. 12 de Octubre University Hospital, Madrid
- ♦ Specialist in Physical Medicine and Rehabilitation, Language Rehabilitation Center (CRL), Madrid
- ♦ Master in Musculoskeletal Ultrasound and Ultrasound-Guided Interventionism. San Pablo Andalucía CEU
- ♦ Degree in Medicine, San Pablo CEU University School of Medicine, Madrid.
- ♦ Pelvic Floor Unit (University Hospital 12 de Octubre, Madrid, Spain)
- ♦ Facial Paralysis and Neurorehabilitation Unit (H.U. La Paz, Madrid)
- ♦ Cardiac Rehabilitation (Cardiac Rehabilitation Unit of HU 12 de Octubre)
- ♦ Respiratory Rehabilitation H.G.U. Gregorio Marañón, Madrid
- ♦ Neurorehabilitation Unit (12 de Octubre H.U.)
- ♦ Rehabilitation in spinal cord injury (National Hospital of Paraplegics, Toledo)

Ms. Blesa Esteban, Irene

- ♦ Internal Medicine Resident: 12 de Octubre University Hospital, Madrid
- ♦ Expert in musculoskeletal ultrasonography
- ♦ Course on Neuropathic Pain Management for Medicine
- ♦ Course on Evaluation and prescription of therapeutic exercise.
- ♦ Course in Life Support for Residents
- ♦ Supervision of doctoral thesis: Diagnosis of congenital heart disease in the first trimester of pregnancy ultrasound

Ms. Jiménez, Henar

- ♦ Internal Medicine Resident: 12 de Octubre University Hospital, Madrid
- ♦ Course on the Safe Use of Medication in the Madrid Health Service
- ♦ Expert in Physiotherapy and Sports Rehabilitation at the International University Isabel of Castile

Dr. Soto Bagaria, Luis

- ♦ Physiotherapist and researcher at Parc Sanitari Pere Virgili
- ♦ Master in Neuromusculoskeletal Physiotherapy
- ♦ Member of the research team on aging, frailty and transitions (Re-Fit BCN)
- ♦ More than 10 years working in the field of aging

Dr. Gil Gracia, Samuel

- ♦ Physiotherapist and Osteopath in free practice in Béziers (France)
- ♦ Member of the Spanish Society of Physiotherapy and Pain SEFID
- ♦ Author of the videoblog Soy Paciente de Samu, a channel of divulgation on physiotherapy for the population
- ♦ Specializing in Musculoskeletal Pain

Dr. Hernandez Espinosa, Joaquín

- ♦ Physiotherapist. Director of residential center Hotel residencia Tercera edad Pineda
- ♦ Postgraduate in Respiratory Physiotherapy
- ♦ More than 20 years of experience in the field of physiotherapy in geriatrics at hospital, home and residential level

Dr. Gómez Orta, Roger

- ♦ Physiotherapist and Orthopedic Technician
- ♦ Co-founder of Quvitec S.L.
- ♦ Responsible for the seating and positioning clinic service at Quvitec
- ♦ Specialist and trainer in patient management of Handicare products in Spain

Dr. Buldón Olalla, Alejandro

- ♦ Expert in physical activity and sport physiotherapy
- ♦ Master's Degree in Social Networks and Digital Learning
- ♦ More than 12 years of experience in residential and home care for the elderly
- ♦ Founder of the blog fisioconectados.com
- ♦ Physiotherapist in the Amavir group and in home care for the elderly

Dr. Jimenez Hernández, Daniel

- ♦ PhD in Educational from the University of Vic
- ♦ Physiotherapist
- ♦ Official Master's Degree in Inclusive Education
- ♦ Member of the research group of attention to diversity at UVic
- ♦ Professor at the University of Vic
- ♦ Trainer of ACP professionals
- ♦ More than 25 years of experience in caring for people in contexts of disability and dependence

04

Structure and Content

Focused especially on the area of frailty in geriatric patients, the syllabus has been developed according to the criteria of training effectiveness that we offer you. Through a complete and detailed syllabus you will cover all the essential subject areas, gradually acquiring the necessary skills to put the necessary knowledge into practice. A very well-developed learning structure that will allow you to learn in a continuous, efficient way and which is tailored to your needs.





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A very complete teaching program, structured in didactic units of great impact, which includes all the aspects that rehabilitative medicine must contemplate in the care of patients with Chronic Pain"

Module 1. Pain and Aging, Update on Current Scientific

- 1.1. Anatomy and Physiology of Pain Transmission
 - 1.1.1. Peripheral Components
 - 1.1.2. Nociceptors
 - 1.1.3. Nociceptor Depolarization
 - 1.1.4. Peripheral Sensitization of Nociceptors
- 1.2. Types of Pain
 - 1.2.1. Introduction
 - 1.2.2. Temporal
 - 1.2.2.1. Acute Pain
 - 1.2.2.2. Chronic Pain
- 1.3. Pain and Aging
 - 1.3.1. Aging
 - 1.3.2. Characteristics of Aging
 - 1.3.3. Prevalence
 - 1.3.4. Physiological Changes of Aging
 - 1.3.5. Physical and Neurological Changes with Impact on Pain Chronification
 - 1.3.5.1. Differences in Pain Perception
 - 1.3.5.2. Increased Chronic Inflammation in Aging
 - 1.3.5.3. Disruption of the Circadian Cycle in Aging
 - 1.3.5.4. Neurodegeneration and Implications for Learning
 - 1.3.5.5. Elderly Depression
 - 1.3.5.6. Sedentary Lifestyle and Frailty in the Elderly
 - 1.3.5.7. Under-Recognized and Under-Treated Pain
- 1.4. Pain Syndromes in Geriatrics
 - 1.4.1. Introduction
 - 1.4.2. Cervical osteoarthritis
 - 1.4.3. Occipital Neuralgia
 - 1.4.4. Cervicogenic Dizziness
 - 1.4.5. Vertebral Fracture due to Osteoporosis
 - 1.4.6. Lumbar Osteoarthritis and Facet Syndrome
 - 1.4.7. Central Canal Stenosis in the Lumbar Spine
 - 1.4.8. Hip osteoarthritis
 - 1.4.9. Shoulder Rotator Cuff Rupture 01/04/2010
 - 1.4.10. Knee Osteoarthritis





- 1.5. Pain Assessment
- 1.6. Pharmacological Treatment of Pain in the Geriatric Patient
 - 1.6.1. Drugs for Pain
 - 1.6.2. Aines
 - 1.6.3. Coxibs
 - 1.6.4. Paracetamol
 - 1.6.5. Metamizole
 - 1.6.6. Opioid Drugs
 - 1.6.7. Phytotherapy
 - 1.6.8. Adjuvant Drugs
- 1.7. Physiotherapist Treatment of the Geriatric Patient

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You will learn in such a way that what you have learned becomes fixed and transformed into knowledge, through a structured study that will cover all the points of interest you need to update your intervention in geriatric rehabilitation”

05 Methodology

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

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





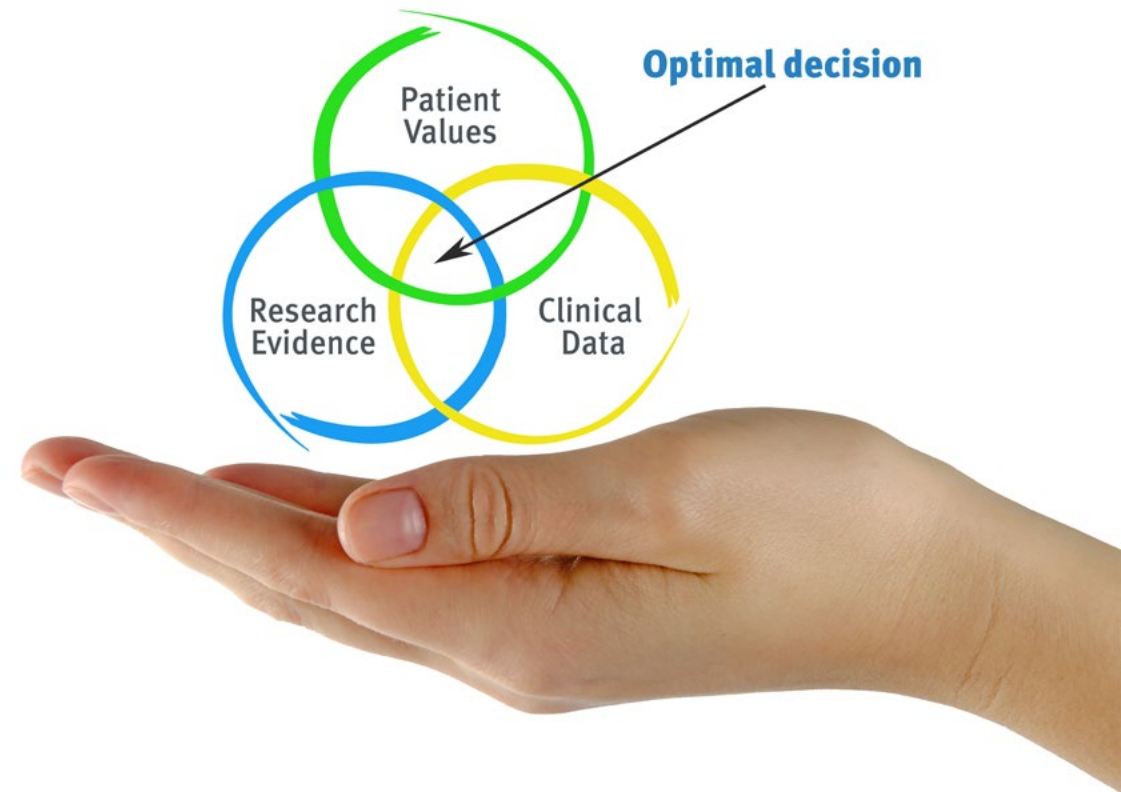
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, 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. Physiotherapists/kinesiologists 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. Gervas, 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 of professional physiotherapy practice.

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

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

1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist 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 Harvard 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.



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

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we trained more than 65.000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a high 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 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 our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really 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.



Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.



Interactive Summaries

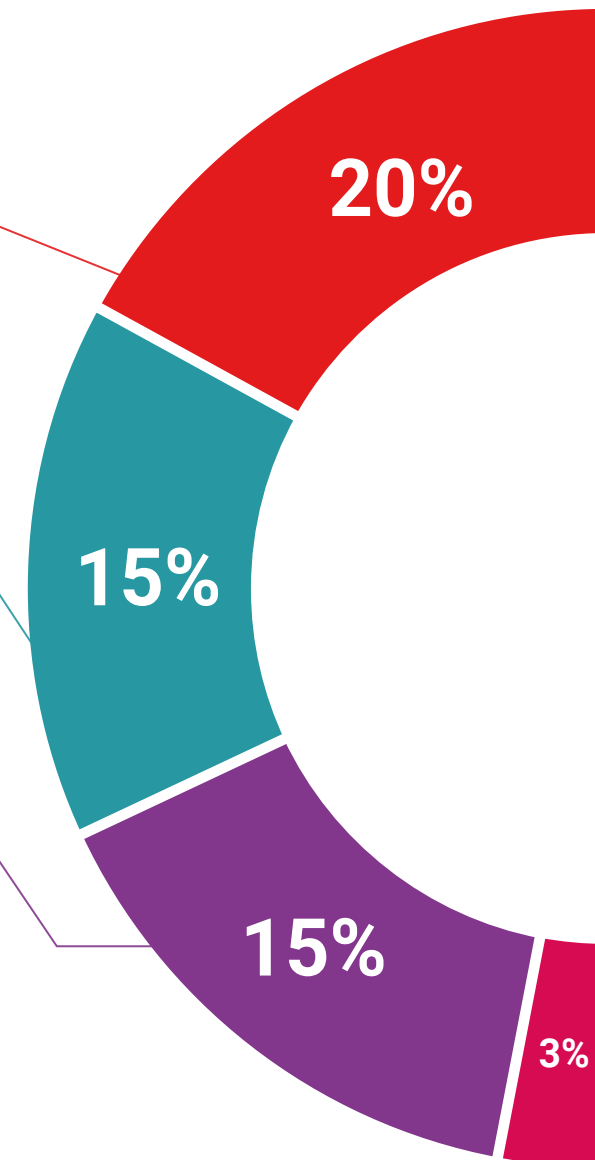
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

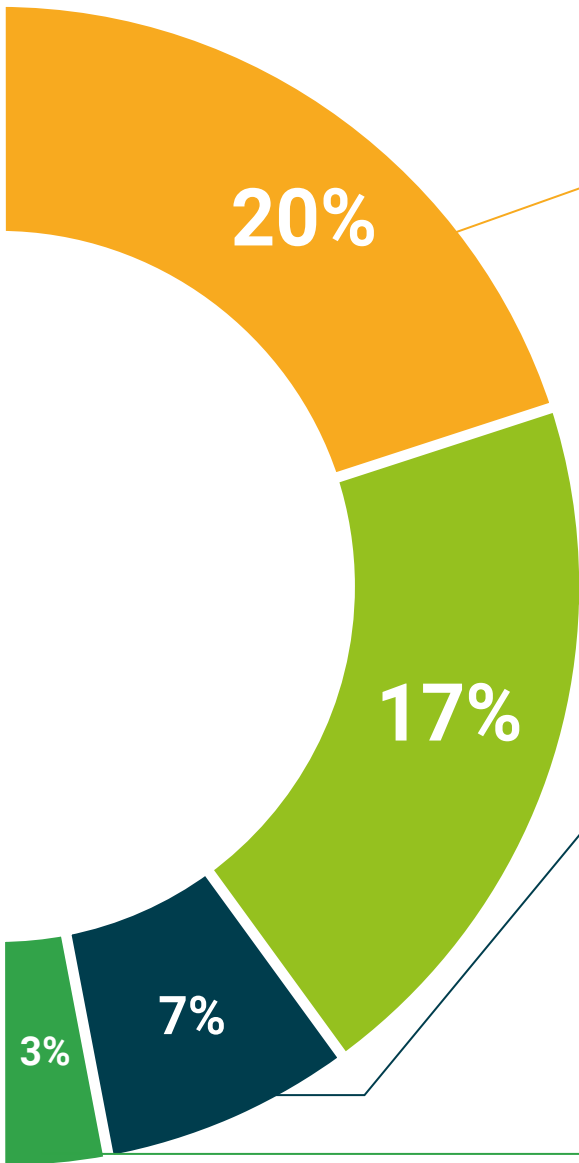
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



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 your goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



Quick Action Guides

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



06 Certificate

This Postgraduate Certificate in Physiotherapy, Pain and Aging: guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.



“

Successfully complete this training and receive your university degree without travel or laborious paperwork”

This **Postgraduate Certificate in Physiotherapy, Pain and Aging** contains the scientific most complete and update program on the market.

After you have passed the evaluations,, you will receive your corresponding byv **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

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

Title: **Postgraduate Certificate in Physiotherapy, Pain and Aging**

Official N° of hours: **175 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.



Postgraduate Certificate

Physiotherapy, Pain and Aging

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Duration: **2 months.**

Certificate: **TECH Technological University**

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Postgraduate Certificate Physiotherapy, Pain and Aging

