



### Postgraduate Certificate

Physical Therapy Approach to the Person with Cognitive Impairment

Course Modality: Online
Duration: 2 months

Certificate: TECH Technological University

Official No of Hours: 200 h.

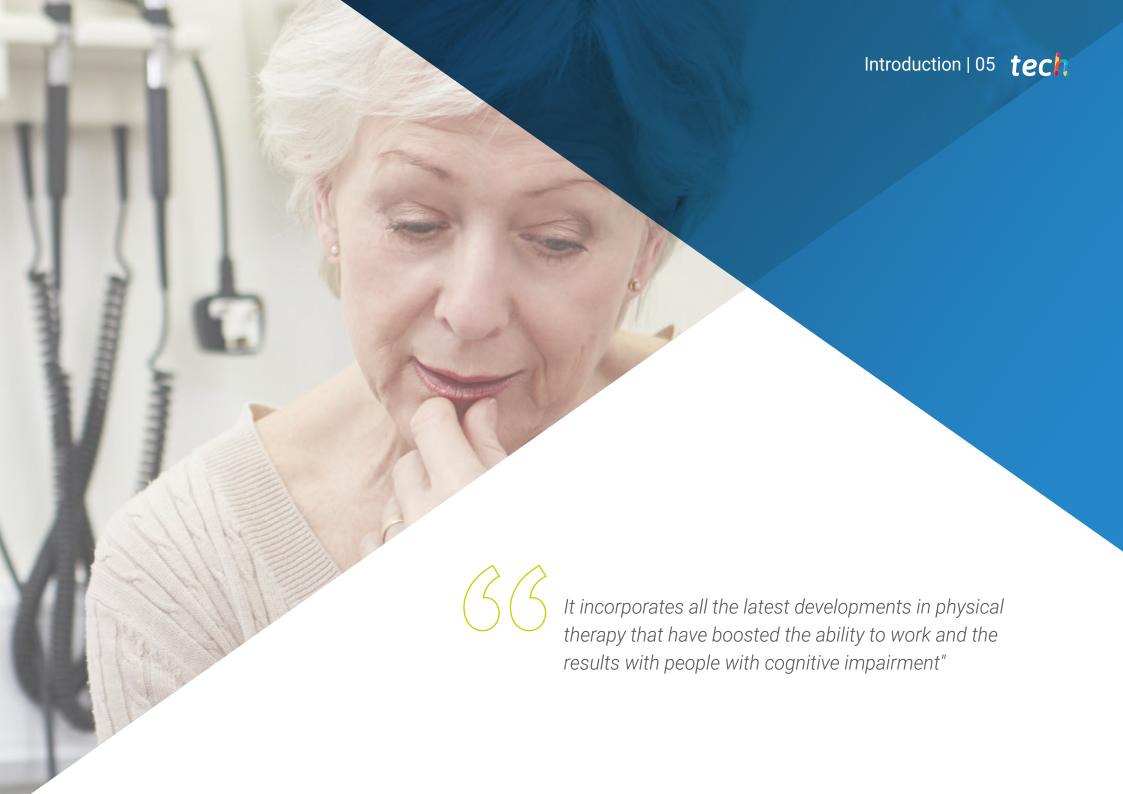
Website: www.techtitute.com/physiotherapy/postgraduate-certificate/physical-therapy-approach-person-cognitive-impairment

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### tech 06 | Introduction

The work in geriatrics in physiotherapy is often confronted with the approach of people with cognitive impairment. This field of work, so relevant and in constant renovation, is nourished by the advances and updates that are appearing and being incorporated to the praxis. The physiotherapist needs to keep his competences in line with them, in order to achieve the improvement of the patients' quality of life.

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 or social centers or private clinics.

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

The topics and clinical cases proposed, as well as their resolution, are based on the practical experience of the teachers and on the latest advances in research and development that nurture this field of work.

All knowledge is presented through high quality multimedia content, analysis of clinical cases prepared by teachers, master classes and video techniques that allow the exchange of knowledge and experience, maintain and update the instructional level of its members, create protocols for action and disseminate the most important developments in rehabilitative medicine approach to rehabilitable pathologies.

This Postgraduate Certificate in Physical Therapy Approach to the Person with Cognitive Impairment 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
- Supplementary documentation databases are permanently available, even after the program



A journey through the new ways and forms and ways of working that will allow us to maintain mental capacity for as long as possible or improve conditions in other cases"



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

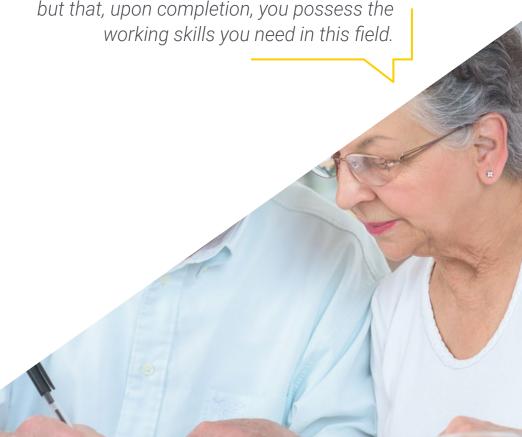
Our teaching staff is made up of professionals from different fields related to this specialty. In this way we ensure that we provide you with the instructional update we intend. A multidisciplinary team of trained and experienced professionals in different environments, who will develop the theoretical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

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this Professional Master's Degree. Developed by a team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in.

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

A methodological approach based on proven teaching techniques to allow you to learn in a dynamic and effective way.

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





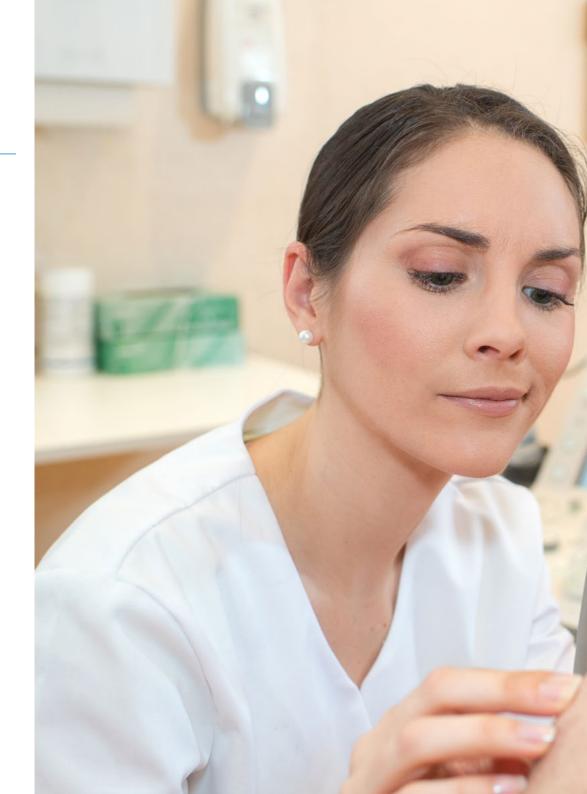


### tech 10 | Objectives



### **General Objective**

• The overall objective is to develop a critical and reasoned attitude, based on the latest scientific evidence, towards the physiotherapeutic diagnosis in the elderly patient and to be able to apply an adequate treatment in order to reduce functional impotence, frailty and deterioration, thus favoring an improvement of physical and mental health in old





### Objectives | 11 tech



### **Specific Objectives**

- Define the risk factors, epidemiology, diagnosis and treatment of cognitive impairment
- Define the risk factors, epidemiology, diagnosis and treatment of dementia
- Defining the types of cognitive impairment: possible classifications
- Define the causes and effects of cognitive impairment
- Describe the therapeutic interventions from the physiotherapy point of view
- Describe strategies to promote family adherence to treatment
- Define strategies to access the disoriented and/or disconnected user
- Explain the application of music as a tool for working with people with dementia





### tech 14 | Course Management

#### **Director**



### D. 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-director**



### 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**

### D. 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

### D. 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

### D. 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

### D. Roger, Gómez Orta

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



### tech 16 | Course Management

### D. Buldón Olalla, Alejandro

- Expert in physical activity and sport physiotherapy
- Master 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

### 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

### D. 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. 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

### 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 Marañon, 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





### tech 20 | Structure and Content

## **Module 1.** Approach from the physiotherapy of the person affected by cognitive impairment

- 1.1. Introduction to Cognitive Impairment
  - 1.1.1. Cognitive Impairment
    - 1.1.1.1. Definition and Epidemiology
    - 1.1.1.2. Risk factors
    - 1.1.1.3. Diagnosis
    - 1.1.1.4. Treatment
      - 1.1.1.4.1. Non-Pharmacological Treatment
      - 1.1.1.4.2. Pharmacological Treatment
  - 1.1.2. Dementia
    - 1.1.2.1. Epidemiology
    - 1.1.2.2. Pathogenesis and Risk Factors
    - 1.1.2.3. Clinical manifestations
    - 1.1.2.4. Evolution
    - 1.1.2.5. Diagnosis
    - 1.1.2.6. Differential Diagnosis
      - 1.1.2.6.1. Mild Cognitive Impairment: Already Explained Previously
      - 1.1.2.6.2. Acute Confusional Syndrome or Delirium
      - 1.1.2.6.3. Subjective Memory Complaints and AMAE (Age-Related Memory Impairment)
      - 1.1.2.6.4. Affective Disorders-Depression-Depressive Pseudodepressive Dementia
    - 1.1.2.7. Severity of dementia
    - 1.1.2.8. Treatment
      - 1.1.2.8.1. Non-Pharmacological Treatment
      - 1.1.2.8.2. Pharmacological Treatment
    - 1.1.2.9. Comorbidity-Mortality
- 1.2. Types of Cognitive Impairment: Possible Classifications
  - 1.2.1. Utility of the Cognitive Impairment Classification

- 1.2.2. Types of Classification
  - 1.2.2.1. By Degree of Affectation
  - 1.2.2.2. By Evolution Course
  - 1.2.2.3. By Age of Presentation
  - 1.2.2.4. By Clinical Syndrome
  - 1.2.2.5. By Etiology
- 1.3. Causes and Effects of Cognitive Impairment
  - 1.3.1. Introduction
  - 1.3.2. Risk Factors for Cognitive Impairment
  - 1.3.3. Causes of Cognitive Impairment
    - 1.3.3.1. Primary Neurodegenerative Etiology
    - 1.3.3.2. Vascular Etiology
    - 1.3.3.3. Other Etiologies
  - 1.3.4. Effects of Cognitive Impairment
    - 1.3.4.1. Inattention and Lack of Concentration
    - 1.3.4.2. Memory Impairment
    - 1.3.4.3. Language Impairment
    - 1.3.4.4. Apraxia
    - 1.3.4.5. Agnosias
    - 1.3.4.6. Executive Function Disorders
    - 1.3.4.7. Alteration of Visuospatial Functions
    - 1.3.4.8. Behavioral Alteration
    - 1.3.4.9. Alteration of Perception
  - 1.3.5. Conclusions
- 1.4. Individual and Group Physical Therapy Approach
  - 1.4.1. Physiotherapy and Dementia
  - 1.4.2. Physical Therapy Assessment
  - 1.4.3. Therapeutic Objectives
  - 1.4.4. Therapeutic Interventions from Physiotherapy
    - 1.4.4.1. Physical exercise
    - 1.4.4.2. Individual Therapy
    - 1.4.4.3. Group Therapy
    - 1.4.4.4. Physiotherapy According to the Stages of Cognitive Impairment
    - 1.4.4.5. Alteration of Balance and Gait
  - 1.4.5. Adherence to Treatment-Family

### Structure and Content | 21 tech

#### 1.5. Tools to Connect

- 1.5.1. Introduction
- 1.5.2. Difficulties Encountered with Disoriented and/or Disconnected Users
- 1.5.3. How to Access the Disoriented and/or Disconnected User
  - 1.5.3.1. Music as a Tool for Working with People with Dementia
    - 1.5.3.1.1. Application of Music in People Affected by Dementia
  - 1.5.3.2. Animal Assisted Therapy (AAT)
    - 1.5.3.2.1. Application of TAA in People Affected by Dementia
    - 1.5.3.2.2. Structure of Sessions
    - 1.5.3.2.3. Materials
    - 1.5.3.2.4. The Dog
    - 1.5.3.2.5. Examples of AAR Application
  - 1.5.3.3. Yoga and Mindfulness
    - 1.5.3.3.1. Yoga
    - 1.5.3.3.2. Mindfulness
    - 1.5.3.3. Application of Mindfulness

#### 1.6. Basal Stimulation

- 1.6.1. Origin of Basal Stimulation
- 1.6.2. Definition of Basal Stimulation
- 1.6.3. Indications of Basal Stimulation
- 1.6.4. Basic principals of Basal Stimulation1.6.4.1. Advantages of Basal Stimulation
- 1.6.5. Basic Needs
  - 1.6.5.1. Requirements of Basal Stimulation
  - 1.6.5.2. Basic Areas of Perception
- 1.6.6. Body Identity and Environment
- 1.6.7. Global
  - 1.6.7.1. Communication

- 1.7. Sharing of Knowledge, Interdisciplinary Approach to the Affected Person
  - 1.7.1. Introduction
  - 1.7.2. Biopsychosocial Model as a Reference
  - 1.7.3. Multidisciplinarity and Interdisciplinarity
  - 1.7.4. Areas of Intervention. Levels of Care
    - 1.7.4.1. Primary Care
    - 1.7.4.2. Specialized Care AE
    - 1.7.4.3. Socio-Health Care ASS
    - 1.7.4.4. Other Professionals
  - 1.7.5. Integrative Health. A Holistic View
  - 1.7.6. Community Intervention
  - 1.7.7. Conclusions

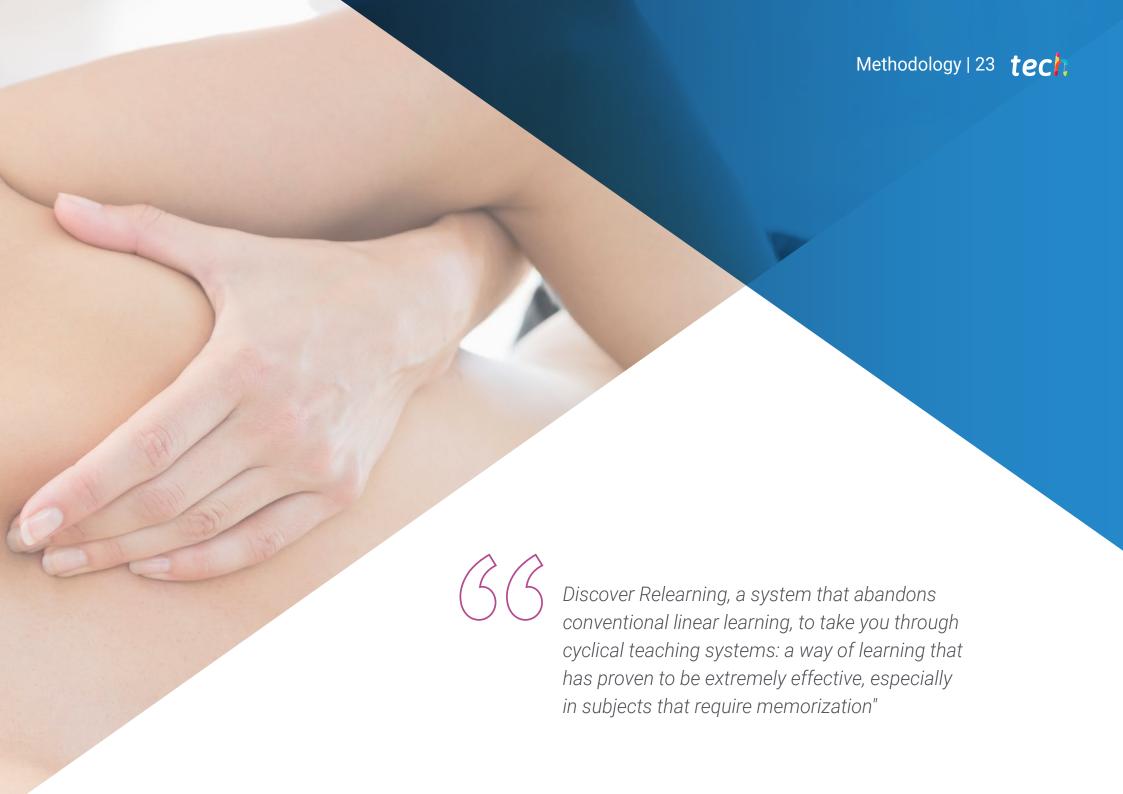


You will learn in such a way that what you have learned becomes fixed and transformed into knowledge, through a structured study that will cover all the points of interest you need to update your intervention in geriatric rehabilitation"



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.

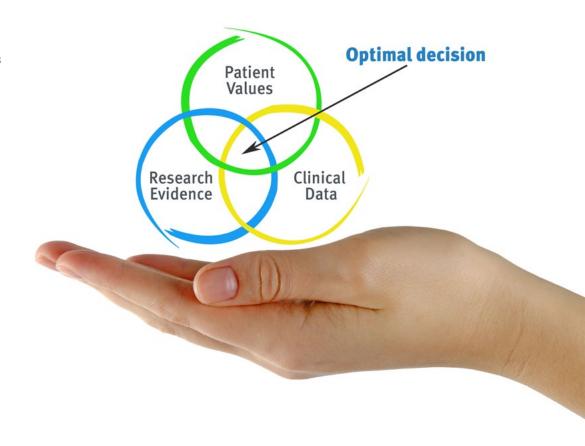


### tech 24 | Methodology

#### 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. 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 of professional physiotherapy 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. 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.



### 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 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.

### 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 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**

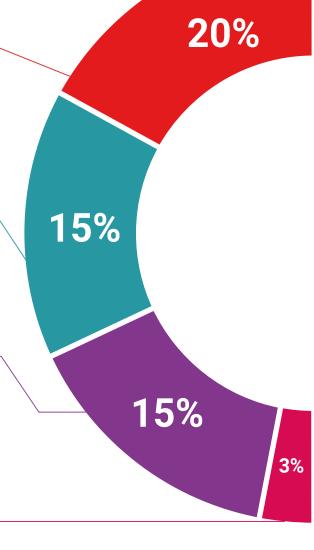
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can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

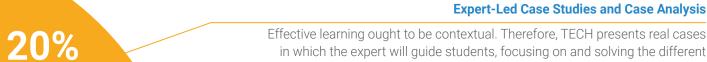
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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.



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

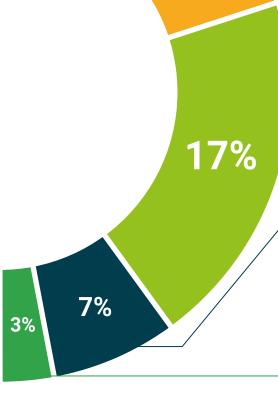
There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



#### **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.









### tech 32 | Certificate

This Postgraduate Certificate in Physical Therapy Approach to the Person with Cognitive Impairment 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 **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 from career evaluation committees.

Title: Postgraduate Certificate in Physical Therapy Approach to the Person with Cognitive Impairment

Official No of Hours: 200 h.



Mr./Ms. \_\_\_\_\_, with identification number \_\_\_\_\_
For having passed and accredited the following program

#### POSTGRADUATE CERTIFICATE

in

#### Physical Therapy Approach to the Person with Cognitive Impairment

This is a qualification awarded by this University, equivalent to 200 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

lune 17 2020

Tere Guevara Navarro

Dean

alification must always be accompanied by the university degree issued by the competent authority to practice professionally in each countr

e TECH Code: AFWORD23S techtitu





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