Postgraduate Certificate

Fragility for Physical Therapy

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Postgraduate Certificate

Fragility for Physical Therapy

Course Modality: **Online**
Duration: **2 months**
Certificate: **TECH Technological University**
Official N° of Hours: **225 h.**
Website: **www.techtitute.com/us/postgraduate-certificate/fragility-physical-therapy**

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01

Introduction

The care of a frail person requires global attention that takes into account the specific limitations and actions that this situation requires. This is due to this type of patient's special vulnerability to pathologies, stress or other situations that are usually not considered. Supported by the most innovative advances in this field, this Postgraduate Certificate will provide you with the most comprehensive knowledge on the subject, with a high quality multidisciplinary and advanced vision.

The specific care that the geriatric patient with frailty needs, comprehensively presented in a program that will give you all the keys to safe intervention in this field"

In order to intervene safely with frail patients, the professional must assess and examine the patient's resistance and physiological reserves in order to establish the appropriate framework for action and choose between 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 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 the treatment of physiotherapy.

This **Postgraduate Certificate in Fragility for Physical Therapy** offers you the characteristics of a high-level scientific, educational and technological program. 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
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after the program

The most interesting and efficient advances and innovations in physiotherapy, in a program created to boost your professional skills"

With the study systems of this program, you will learn quickly and easily, integrating what you have learned in a complete way"

A comfortable and simple methodological approach that will allow you to adapt your effort and dedication with total freedom, without losing efficiency in learning

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 learning 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.

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 to excel in this field

02

Objectives

This program will mark a before and after in your professional growth. The objective is to provide students with specialized knowledge 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 in this field today.

A high-quality program that will allow you to include the specific knowledge involved in the care of frail patients in your daily practice"

General Objective

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

Specific Objectives

- Define the tools for comprehensive geriatric assessment of frailty
- Apply the different frailty assessment scales
- Explain the assessment of frailty in physical therapy
- Explain the prescription of physical activity in the frail person
- Develop strategies to implement group dynamics in the frail or pre-frail patient
- Define the risk factors for falls
- Explain specific fall risk diagnostic tests
- Describe restraint methods to prevent falls

03

Course Management

Learn from the hand of reference specialists in physiotherapy and geriatrics, who contribute the experience of their work to this program. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner.

With the best teachers, who are specialists in this field of work, in a professional growth experience that will be highly valuable for your CV"

International Guest Director

Dr. Tracy Friedlander is an eminent international expert, specialized in Physiotherapy and Rehabilitation of the elderly. Her extensive knowledge and skills in this field have enabled her to implement innovative procedures and improve the quality of life of various patients over the years.

Thanks to her high level of care, the scientist has been selected as Medical Director of the Comprehensive Acute Inpatient Rehabilitation Unit at Johns Hopkins Bayview Medical Center. She has also been part of the medical teams at the prestigious Johns Hopkins Hospital.

Her main area of expertise is Neurological Rehabilitation. In this field, the expert has scientific publications referenced in peer-reviewed journals of high impact in the health community. As such, she has focused her efforts on helping patients to control Spasticity, a muscle control disorder, through various therapeutic approaches.

In addition, some of her most outstanding research in recent years is related to the rehabilitation of patients subjected to long periods of mechanical ventilation when infected with the SARS-CoV-2 virus. She is also fully qualified to treat joint pain, fibromyalgia and chronic pain and fatigue.

Dr. Friedlander also holds official certifications from the American Board of Physical Medicine and Rehabilitation. All of this is backed by her excellent knowledge in the precise and advanced care of spinal cord injuries. On the other hand, this specialist has an excellent academic background. She graduated from Emory University in Atlanta and obtained her medical degree from the University of Maryland. She also completed her internship at Mercy Medical Center and her residency in Physical Medicine and Rehabilitation at Sinai Hospital in Baltimore.

Dra. Friedlander, Tracy

- Director of the Department of Physical Medicine and Rehabilitation at Johns Hopkins Hospital
- Medical Director of the Comprehensive Acute Inpatient Rehabilitation Unit at Johns Hopkins Bayview Medical Center
- Specialist in Neurorehabilitation and Spasticity Management
- Official certifications from the American Board of Physical Medicine and Rehabilitation
- Specialist in Physical Medicine and Rehabilitation at Sinai Hospital of Baltimore
- Medical Graduate from the University of Maryland, Baltimore
- Member of:
  - American Academy of Physical Medicine and Rehabilitation
  - American Spinal Cord Injury Association
  - Maryland Society for Physical Medicine and Rehabilitation

Thanks to TECH, you will be able to learn with the best professionals in the world"

Guest Director

Dr. Castillo, Juan Ignacio

- Head of the Hematology Department at the 12 de Octubre Hospital, Madrid
- Associate Professor at the Complutense University of Madrid, School of Medicine, 2016
- Collaborating Professor at the Complutense University of 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's Degree in Disability Assessment, Autonomous University of Madrid
- Master's Degree in Childhood Disability, Complutense University of Madrid
- Doctorate Course: Neurosciences, University of Salamanca
- Degree in Medicine and Surgery from the University of Salamanca
- Coordinator of continuing education of the Spanish Society of Cardiology in Exercise Testing with Oxygen Consumption

Co-Direction

Dr. García Fontalba, Irene

- Manager and physiotherapist at the private physiotherapy center Cal Moure'S, 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" (Physios and Other Stories)
- 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

Dr. Díaz Zamudio, Delia

- Resident Intern of Rehabilitation and Physical Medicine in the Rehabilitation Service of the 12 de Octubre University Hospital
- Attending specialist in the Rehabilitation Service of the 12 de Octubre University Hospital, Madrid
- Honorary Collaborator of the Department of Physical Medicine and Rehabilitation and Hydrology at the 12 de Octubre Hospital, 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 Alto Deba University Hospital, Mondragón, San Sebastián in 2012

Dr. Cuesta Gascón, Joel

- Resident of Physical Medicine and Rehabilitation at the 12 de Octubre University Hospital, 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 post-MIR 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

Dr. González García, María Dolores

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

Dr. Pino Giráldez, Mercedes

- Assistant Rehabilitation Physician at the 12 de Octubre University Hospital, Madrid
- Specialist in Physical Medicine and Rehabilitation, University Hospital of Guadalajara
- Specialist in Childhood Disability from the Complutense University of Madrid
- Degree in Medicine and Surgery from Alcalá de Henares University, Madrid
- Residency training in Physical Medicine and Rehabilitation
- Medical Rehabilitation Specialist at the Jimenez Diaz Foundation Hospital, 2012
- Assistant Rehabilitation Physician at Rey Juan Carlos I Hospital, Madrid, 2013
- Assistant Rehabilitation Physician at Torrejón de Ardoz Hospital, 2014
- Assistant Rehabilitation Physician at the University Hospital of Guadalajara, 2014

Dr. García, Sofía

- Specialist Doctor- Physical Medicine and Rehabilitation, Pediatric Rehabilitation Department, 12 de Octubre University Hospital, Madrid
- Specialist Doctor- Physical Medicine and Rehabilitation, 12 de Octubre University Hospital, Madrid
- Specialist in Physical Medicine and Rehabilitation, Language Rehabilitation Center, Madrid
- Master's Degree 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 (12 de Octubre University Hospital, Madrid, Spain)
- Facial Paralysis and Neurorehabilitation Unit (La Paz University Hospital, Madrid)
- Cardiac Rehabilitation (Cardiac Rehabilitation Unit of 12 de Octubre University Hospital)
- Respiratory Rehabilitation Gregorio Marañon General University Hospital, Madrid
- Neurorehabilitation Unit (12 de Octubre UH)
- Rehabilitation in spinal cord injury (National Hospital of Paraplegics, Toledo)

Dr. 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: Ultrasound Diagnosis of Congenital Heart Disease in the First Trimester of Pregnancy

Dr. 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's Degree 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 on physiotherapy for the population
- Specialist in Musculoskeletal Pain

Dr. Jimenez Hernández, Daniel

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

Dr. Roger, Gómez Orta

- 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. Hernandez Espinosa, Joaquín

- Physiotherapist. Director of residential center Pineda Senior Citizens Hotel Residence
- Postgraduate Degree in Respiratory Physiotherapy
- More than 20 years of experience in the field of Geriatric Physiotherapy at hospital, home and residential level

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

04

Structure and Content

The instructional effectiveness that we offer you is materialized in a complete and innovative program, incorporating up-to-date information on currently relevant topics and other subjects that will provide a review and consolidation of essential basic knowledge. Through a complete and detailed syllabus you will cover all the essential subject areas, gradually acquiring the skills required to put the necessary knowledge into practice. A very well-developed learning structure that is tailored to your needs and will allow you to learn in a continuous, efficient way.

A complete teaching program that includes all the aspects that should be considered within physiotherapy in the care of patients with frailty"

Module 1. Understanding Fragility

1.1. Integral Vision of Fragility
- 1.1.1. Introduction
- 1.1.2. Definitions of Fragility
- 1.1.3. Pathophysiological Bases of Frailty
  - 1.1.3.1. Activation of Inflammation and Coagulation Processes
  - 1.1.3.2. Comorbidity
  - 1.1.3.3. Malnutrition and Sarcopenia
- 1.1.4. Frailty as a Syndrome
- 1.1.5. Interventions and Models of Care

1.2. Tools for Comprehensive Geriatric Assessment of Frailty
- 1.2.1. Introduction
- 1.2.2. Comprehensive Geriatric Assessment
- 1.2.3. Frailty Assessment Scales
- 1.2.4. Conclusions
- 1.2.5. Learning Points

1.3. Assessment of Frailty in Physiotherapy
- 1.3.1. Initial Interview
- 1.3.2. Highlighted Tests
  - 1.3.2.1. Specific Tests for Frailty
  - 1.3.2.2. Fall Risk Test
  - 1.3.2.3. Dual Tasks
  - 1.3.2.4. Strength Test
  - 1.3.2.5. Cardiopulmonary Capacity Test
  - 1.3.2.6. Functional Tests
- 1.3.3. Parameter Calculation
- 1.3.4. Summary

1.4. Exercise Prescription
- 1.4.1. General Aspects
- 1.4.2. Individual Exercise Prescription
  - 1.4.2.1. Heating
  - 1.4.2.2. Strength/Power
  - 1.4.2.3. Balance
  - 1.4.2.4. Aerobic Endurance
  - 1.4.2.5. Stretching
- 1.4.3. Group Dynamics in the Frail or Pre-Frail Patient
  - 1.4.3.1. Heating
- 1.4.4. Summary

1.5. Therapeutic Adherence
- 1.5.1. Factors of Non-Adherence
  - 1.5.1.1. Socioeconomic Factors
  - 1.5.1.2. Health System or Care
  - 1.5.1.3. Disease
  - 1.5.1.4. Treatment
  - 1.5.1.5. Patients
- 1.5.2. Adherence Strategies
  - 1.5.2.1. ICT
- 1.5.3. Summary

1.6. Assessment of Frailty in Physiotherapy
- 1.6.1. Define the Risk Factors for Falls
- 1.6.2. Diagnosis of Falls
  - 1.6.2.1. Specific Fall Risk Diagnostic Tests
- 1.6.3. Consequences of Falls
- 1.6.4. Containment to Prevent Falls
  - 1.6.4.1. Side Effects of Containment
  - 1.6.4.2. Adapted Containment
  - 1.6.4.3. Environmental and Verbal Restraints
  - 1.6.4.4. Types of Containments
- 1.6.5. Post-Fall Treatment
- 1.6.6. Summary

1.7. Care Transitions
- 1.7.1. Justification of Programs in Transitions
- 1.7.2. Limitations in Care Transitions
- 1.7.3. What Are We Talking About When We Talk About Care Transitions?
- 1.7.4. An Example of "Prealta Service": *Transition Coaches*
- 1.7.5. Nursing Frailty Assessment at Discharge
  - 1.7.5.1. Communication Techniques
  - 1.7.5.2. Motivational Interview
  - 1.7.5.3. Person-Centered Care; Health Goals for the Elderly

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 that you need to update your practice in geriatric rehabilitation"

05

Methodology

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

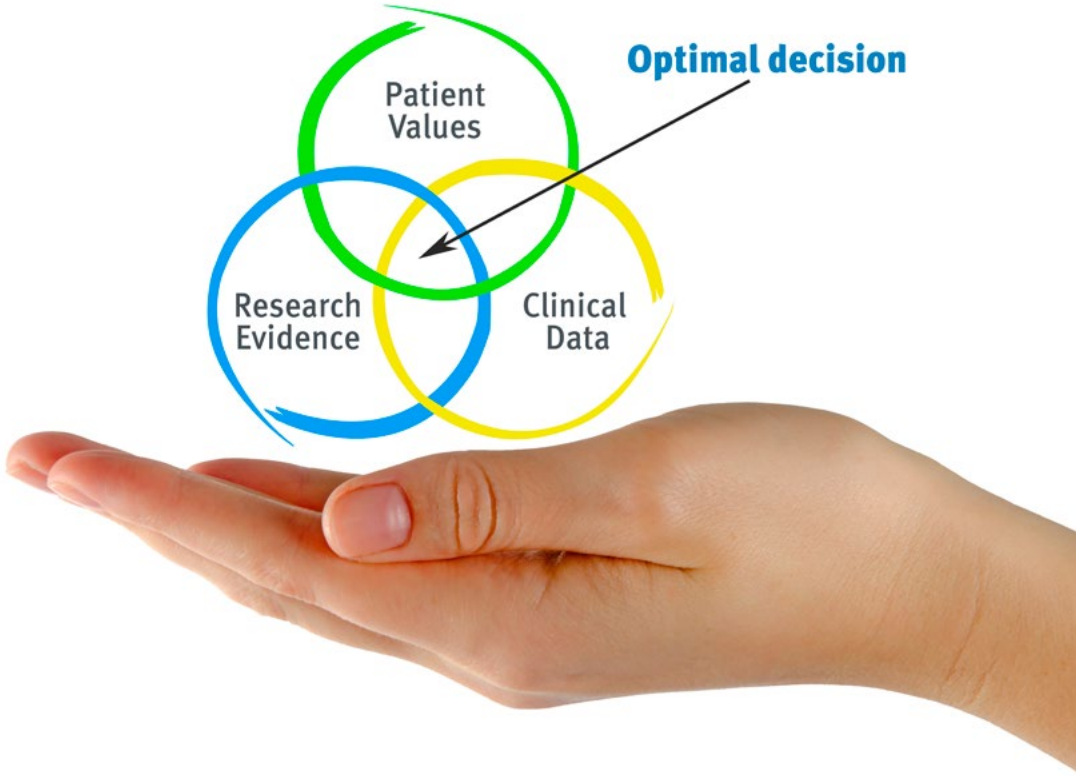
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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. 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:

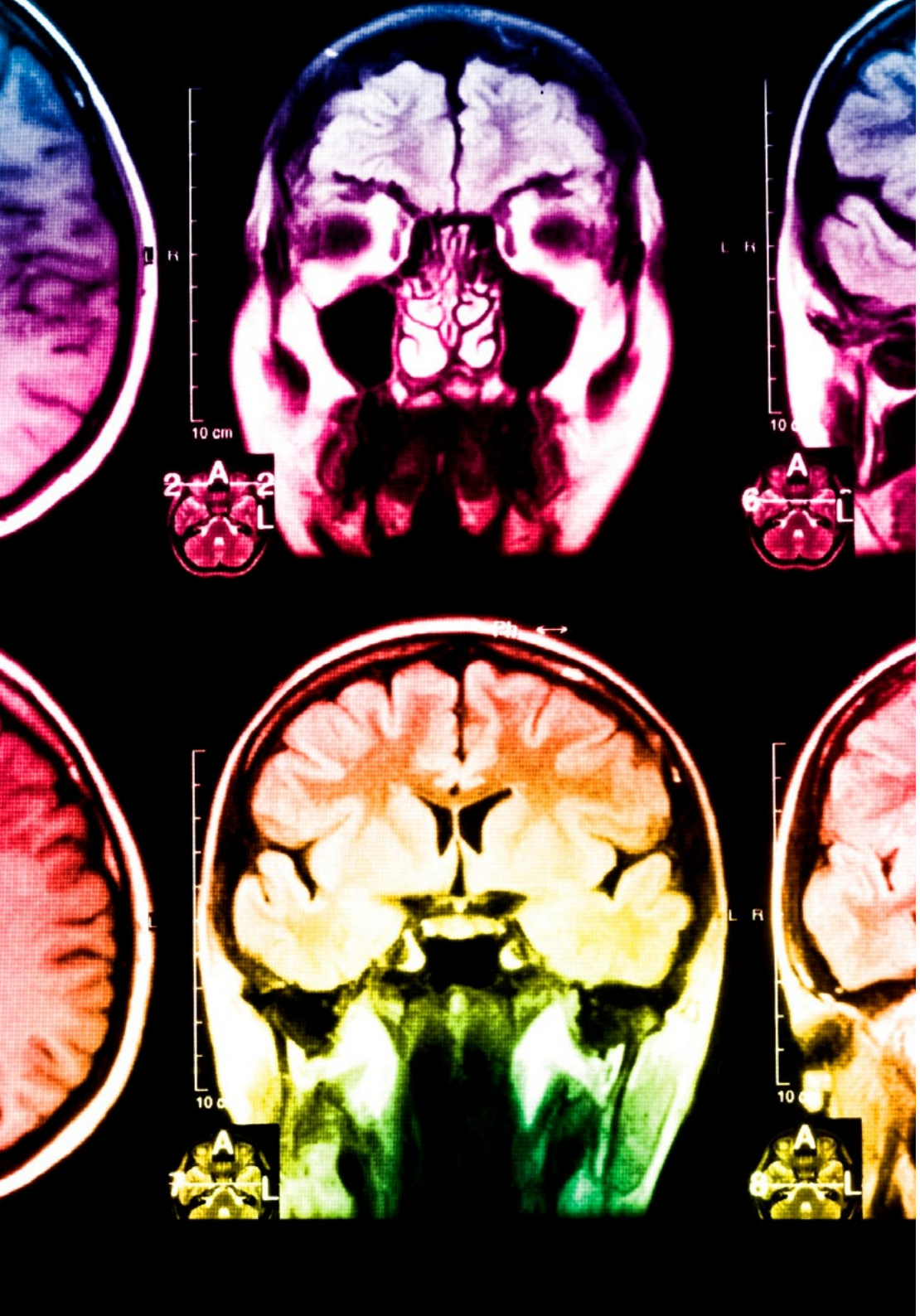
1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better 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 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.

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



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.

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.

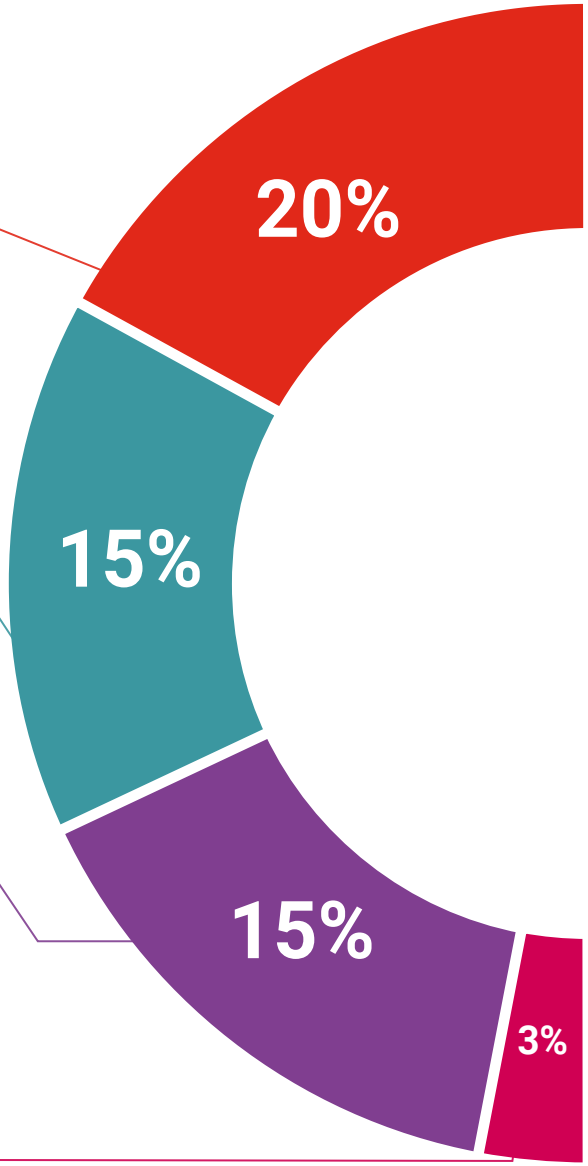
Interactive Summaries

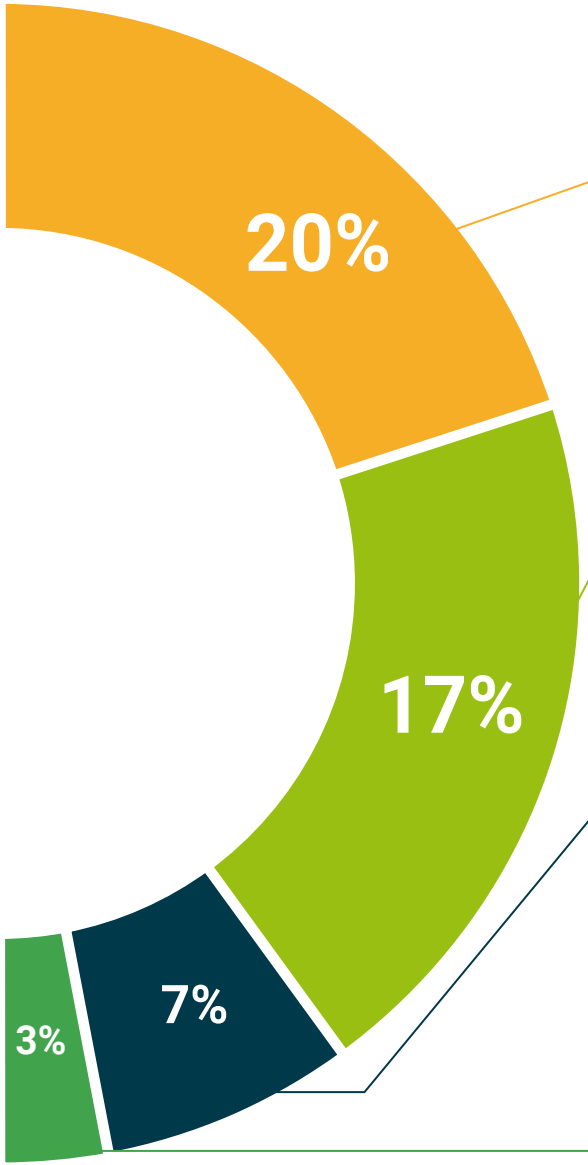
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive 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 their 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

The Postgraduate Certificate in Fragility for Physiotherapy guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your university diploma without travel or laborious paperwork"

This **Postgraduate Certificate in Fragility for Physical Therapy** 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 diploma 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 Fragility for Physical Therapy**

Official N° of Hours: **225 h.**


tech technological university

Awards the following

DIPLOMA

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Fragility for Physical Therapy

This is a qualification awarded by this University, equivalent to 225 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.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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