## **Professional Master's Degree** Geriatric Rehabilitation Medicine



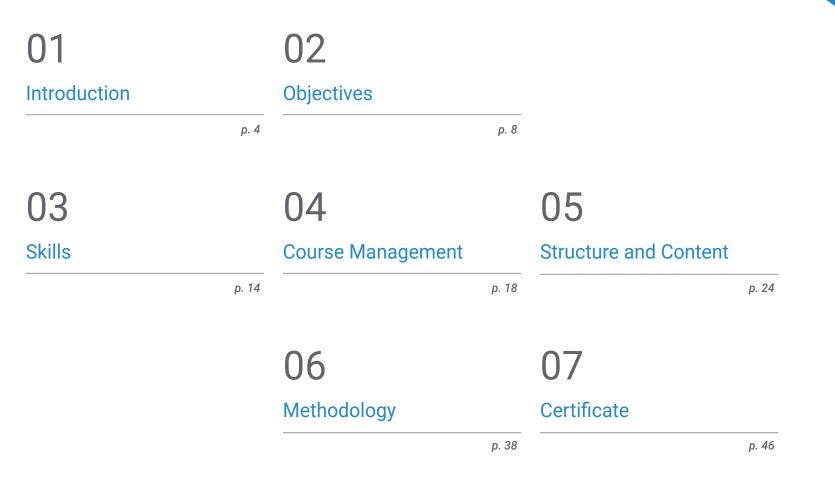


**Professional Master's Degree** Geriatric Rehabilitation Medicine

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/professional-master-degree/master-geriatric-rehabilitation-medicine

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## 01 Introduction

The level of complexity professionals face in Geriatric Rehabilitation Medicine rises in clinical practice due to a progressively aging population. Given this, rehabilitation intervention becomes an essential work tool to ensure the quality of life of elderly patients. Advances in medicine and technology offer new and interesting approaches that require continuing education effort so professionals can intervene with the best chances of success.

Acquire the most up-to-date knowledge in Geriatric Rehabilitation Medicine, with a Professional Master's Degree that comprehensively compiles the approaches used in the field"

## tech 06 | Introduction

Quality care in rehabilitation requires physicians to have the tools to treat elderly patients whose abilities are affected to some extent, not only to maintain them but also to prevent or reverse the loss of autonomy that may ensue.

Achieving these objectives must start from a theoretical framework with the tools physicians can use to create a clinically sound treatment strategy, set rehabilitation goals, and ultimately begin physiotherapeutic treatment.

To do this, professionals must assess and explore the patient, understanding the most complex aspects, such as the patient's social context, the framework of action (home care, residential centers, day care centers, social centers and private clinics).

This work should include treatments for pre-frailty, frailty, pain, trauma, neurological, respiratory and/or pelvic floor disorders, gerontological syndromes or cognitive impairment, side effects from drugs and/or biopsychosocial conditions that may complicate the clinical picture.

It is, therefore, essential to become familiar with the tools used in physiotherapy and the appropriate prescription for each case, such as active exercise, manual therapy, electrotherapy, among others. Physicians must also be able to work in interdisciplinary team, with appropriate communication tools, understanding the concept of personcentered care, having the most updated knowledge of support devices and even the support of current technology, if their physiotherapy treatments are to be successful. This **Professional Master's Degree in Geriatric Rehabilitation Medicine** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- 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

An in-depth study into various therapeutic situations that may arise with geriatric patients during rehabilitation"

## Introduction | 07 tech

A study created to provide professionals with a complete and accurate vision of the interventions required in different cases that geriatric patients may present"

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 the information is presented in the form of high-quality multimedia content, analysis of clinical cases prepared by the professors, master classes and video techniques that allow for the exchange of knowledge and experiences, for team members to maintain and update their educational levels, create action protocols and disseminate the most important developments in the approach to pathologies in physical medicine and rehabilitation.

Our teaching staff is made up of professionals from different areas in this field of expertise. This way, TECH ensures that it delivers the up-to-date knowledge it intends to provide. A multidisciplinary team of specialized and experienced professionals in different environments, who will impart the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience at the service of the program: one of the differential qualities of this Professional Master's Degree.

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. That way, students will be able to study with a range of convenient and versatile multimedia tools that will give them the operability they need during the training.

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, TECH uses telepractice: With the help of an innovative, interactive video system and Learning from an Expert students will be able to acquire the knowledge as if they were working on each scenario in real life. A concept that will allow students to integrate and memorize what they have learnt in a more realistic and permanent way.

With the real experience of rehabilitation specialists who will teach you to work in an interdisciplinary way, taking advantage of and promoting synergy between the various areas of intervention.

Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: learning from an expert.

# 02 **Objectives**

This Professional Master's Degree compiles the most up-to-date knowledge in geriatric rehabilitation medicine. The objective is to help students develop specialized knowledge by creating a well-structured foundation 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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The approach this Professional Master's Degree employs will allow you to learn and assimilate the content such that it becomes a real tool for professional development and growth"

## tech 10 | Objectives



### **General Objective**

• Develop a critical and reasoned attitude, based on the most recent scientific evidence, towards physiotherapeutic diagnosis in elderly patients, and learn to apply the appropriate treatment in order to reduce functional impotence, fragility and deterioration, thus favoring improved physical and mental health in old age.

Seize the opportunity and take the step to get up to date on the latest developments in Geriatric Rehabilitation Medicine"



## Objectives | 11 tech





### Specific Objectives

#### Module 1. Clinical Reasoning in Geriatric Physiotherapy

- Explain active aging from the patient's point of view
- Define physiotherapy scope of performance in geriatrics
- Define the role played by physiotherapy in palliative care units
- Define the use of new technologies in Geriatric Rehabilitation
- Explain what interdisciplinary teams in geriatrics consist of
- Define the composition and functioning of interdisciplinary teams
- Explain the main functions within interdisciplinary teams
- Establish the checklist for red/yellow flags in differential diagnosis
- Describe the major geriatric syndromes
- Explain what checklist for Red/Yellow Flags consists of
- Define the most common red flags in clinical practice
- Explain the proper approach to physical therapy sessions in geriatrics
- Describe physiotherapeutic examination and assessment of geriatric patients
- Define the effects of certain drugs on the neuromusculoskeletal system

### Module 2. Person-Centered Care (PCC)

- Describe the ten commandments in person-centered care
- Explain transformation process from a service model to a PCC model
- Explain the physical therapy service provision in a PCC model

## tech 12 | Objectives

#### Module 3. Understanding Fragility

- Define fragility from an integral vision
- Explain the impact and detection of malnutrition and sarcopenia
- 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-fragile patient
- Define the risk factors for falls
- Explain specific fall risk diagnostic tests
- Describe restraint methods to prevent falls
- Explain what patient empowerment at discharge consists of
- Defining coordination between levels of care for continuity of care
   with the community

#### Module 4. Professional Approach to Patients Affected by Cognitive Impairment

- 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



## Objectives | 13 tech

- Define strategies to access the disoriented and/or disconnected user
- Explain the application of music as a tool for working with people with dementia
- Define the origin, indications and basic principles of basal stimulation
- Define the advantages of basal stimulation
- Define community intervention in physiogeriatrics

#### Module 5. Pain and Aging, Update on Current Scientific Evidence

- Explain the anatomy and physiology of pain transmission
- Define the different types of pain
- Describe 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 geriatric patients
- Explain the physiotherapeutic treatment of the geriatric patient

#### Module 6. Update on Support Devices for Personal Autonomy

- Define and classify the different support devices for daily life activities
- Define and classify the different pressure relieving devices to prevent pressure ulcers
- Explain the novelties in the different devices designed to facilitate mobility and correct posture
- Explain the application of accessibility and architectural barrier removal support products
- Define new technology for the creation of low-cost support products

#### Module 7. Traumatology, Neurology, Pelvic Floor and Respiratory Conditions in the Elderly. Searching for Evidence

- Define the role played by Physiotherapy in fractures and dislocations in the elderly
- Explain the main fractures in the elderly and their physiotherapeutic treatment
- Explain the main dislocations in the elderly and their physiotherapeutic treatment
- Explain the role played by Physiotherapy in hip, knee and shoulder arthroplasty
- Define the role played by Physiotherapy in osteoarthritis and rheumatoid arthritis
- Describe the role played by physiotherapy in amputee patients
- Define the role played by physical therapists in prosthetic rehabilitation programs
- Explain the recommendations for long-term management of the amputee patient
- Define the physiotherapeutic approach to acute, subacute and chronic stroke patients
- Describe the management of common complications in stroke patients
- Explain new trends in physical therapy for patients with Parkinson's disease
- Define the role played by physiotherapists in urinary incontinence and chronic urinary retention
- Explain what respiratory Physiotherapy in COPD consists of
- Explain what respiratory Physiotherapy in neurological conditions consists of
- Define communication as a tool for successful treatment in physical therapy

#### Module 8. Tools Used in Daily Practice in Geriatrics

- Define the basis of communication with the elderly
- Explain communication difficulties associated with gerontological syndromes
- Explain how professionals approach bereavement

## 03 **Skills**

This Professional Master's Degree in Geriatric Rehabilitation Medicine was created as a highly qualified tool for professionals in the field. The main objective of the program is to create high-quality professionals capable of dealing with the cases in daily clinical practice, with the appropriate and expert use of the latest technological and treatment resources available.

Skills | 15 tech

You will complete your learning process having mastered the most up-to-date techniques and protocols in rehabilitative care, prevention and approach to pathologies in elderly patients"

## tech 16 | Skills



### **General Skills**

- Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study
- Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- Acquire the learning skills that will enable further study in a largely self-directed or autonomous manner



## Skills | 17 tech





- Define the current situation of physiotherapy in geriatrics
- Define the concept of active aging
- Explain active aging from the patient's point of view
- Describe the role played by physical therapists in active aging programs
- Define physiotherapy scope of performance in geriatrics
- 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
- Describe the use of animal-assisted therapy (AAT)
- Explain the use of yoga and Mindfulness in geriatrics
- Define the origin, indications and basic principles of basal stimulation
- Define the basis of communication with the elderly person
- Explain communication difficulties associated with gerontological syndromes
- Explain how professionals approach bereavement
- Describe the use of ICT as a potential ally to the interdisciplinary team and the caregiver/ family nucleus in the treatment of elderly patients
- Define the use of technology in aging
- Describe the decalogue of person-centered care
- Define the PCC model
- Explain transformation process from a service model to a PCC model
- Explain the physical therapy service provision in an PCC model

## 04 Course Management

The program includes in its teaching staff specialists in the field of physical medicine and rehabilitation, who bring to this specialization program the experience of their work. Additionally, other recognized specialists participate in the design and preparation, which infuses an interdisciplinary character to the program.

A selection of expert professors in geriatric rehabilitation will be in charge of helping you master this area of work"

## tech 20 | Course Management

### International guest conductor

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.



## Dr. 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"

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## tech 22 | Course Management

### **Guest Director**



#### Dr. Castillo, Juan Ignacio

- Chief of Physical Medicine and Rehabilitation Service 12 de Octubre Hospita
- Chief of Physical Medicine and Rehabilitation Service 12 de Octubre Hospital, Madrid
- Associate Professor, Complutense University of Madrid Faculty of Medicine
- Collaborating Professor, Complutense University of Madrid
- Teaching Coordinator, Continuing Training Courses, Department of Health of the Community of Madrid: Tertiary Prevention in Chronic Cardiopathic Patients Cardiac Rehabilitation
- Master's Degree in Cardiac Rehabilitation SEC-UNED
- Master in Disability Assessment Autonomous University Madrid
- Master's Degree in Child Disability Complutense University of Madrid
- Doctorate Course: Neurosciences University of Salamanca
- Degree in Medicine and Surgery University of Salamanca
- Coordinator, Continuing Education, Spanish Society of Cardiology in Exercise Testing with Oxygen Consumption

#### Management



#### Ms. García Fontalba, Irene

- Manager and Physiotherapist at Cal Moure'S private physiotherapy center
- Member of the Girona Territorial Section of the Association of Physiotherapists of Catalonia
- Creator of the blog Fisios y otras historias
- Psychology Student
- Coordinator, Group of Social Networks, Group of Professionals for the Promotion of Health in Girona
- More than ten years working in geriatric pathology and processes involving pain at home and in private practice

## Course Management | 23 tech

### Professors

#### Ms. Blesa Esteban, Irene

- Internal Medicine Resident: 12 de Octubre University Hospital
- 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

#### Mr. 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, Amavir Group, Home Care for the Elderly

#### Dr. Cuesta Gascón, Joel

- Resident, Physical Medicine and Rehabilitation, 12 de Octubre University Hospital
- Professor, Specialization Course in Neuropathic Pain, La Princesa Hospital
- Organizer and speaker at See You on the 12th Fundamentals and Physiology of Sport
- 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
- Medical Degree, Camilo José Cela University
- Expert in Musculoskeletal Ultrasonography

#### Ms. Díaz Zamudio, Delia

- Resident Intern, Rehabilitation and Physical Medicine, Rehabilitation Service, 12 de Octubre
  University Hospital
- Adjunct Specialist, Rehabilitation Service, 12 de Octubre University Hospital
- Honorary Collaborator, Department of Physical Medicine and Rehabilitation and Hydrology, 12 de Octubre Hospital
- Degree in Medicine and Surgery Faculty of Medicine University of Seville
- Area Specialist Physician, Rehabilitation and Physical Medicine, Rehabilitation Service, Denia University Hospital
- Area Specialist Physician, Rehabilitation and Physical Medicine, Rehabilitation Service, Alto
   Deba University Hospital

#### Ms. González García, María Dolores

- Head of the Neurological Rehabilitation Service, 12 de Octubre Hospital
- Area Specialist Physician, 12 de Octubre Hospital
- Degree in Medicine and Surgery, University of Alcala Alcala de Henares University
- Specialist in Physical Medicine and Rehabilitation
- Completion of the Specialty in Physical Medicine and Rehabilitation as a Resident Intern (MIR), Rehabilitation Service, 12 de Octubre University Hospital, 2002-2006

## tech 24 | Course Management

#### Ms. García, Sofía

- Specialist in Physical Medicine and Rehabilitation, Children's Rehabilitation Unit, 12 de Octubre University Hospital
- Specialist Physician, Physical Medicine and Rehabilitation, 12 de Octubre University Hospital
- Specialist in Physical Medicine and Rehabilitation, Language Rehabilitation Center
- Degree in Medicine, San Pablo CEU University School of Medicine
- Master in Musculoskeletal Ultrasound and Ultrasound-Guided Interventionism San Pablo Andalucía CEU
- Pelvic Floor Unit, 12 de Octubre University Hospital
- Facial Paralysis and Neurorehabilitation Unit, La Paz University Hospital
- Cardiac Rehabilitation, Cardiac Rehabilitation Unit, 12 de Octubre University Hospital
- Respiratory Rehabilitation, Gregorio Marañón General University Hospital
- Neurorehabilitation Unit, 12 de Octubre University Hospital
- Spinal Cord Injury Rehabilitation, National Paraplegic Hospital, Toledo

#### Mr. Gil Gracía, Samuel

- Physiotherapist and Osteopath, free practice in Béziers
- Member of the Spanish Society of Physiotherapy and Pain SEFID
- Author of the videoblog Soy Paciente de Samu, a dissemination channel on physiotherapy
- Specialist in Musculoskeletal Pain

#### Mr. Gómez Orta, Roger

- Physiotherapist and Orthopedic Technician
- Co-founder of Quvitec
- Head of the Seating and Posture Clinical Service, Quvitec
- Specialist and Trainer in Handicare Products for Patient Management, Spain

#### Mr. Hernández Espinosa, Joaquín

- Director, Hotel Residencia Tercera Edad Pineda Nursing Home
- Postgraduate Course in Respiratory Physiotherapy
- More than 20 years of experience in the field of physiotherapy in geriatrics at hospital, home and residential level

#### Mr. Jiménez, Henar

- Resident Medical Intern at the 12 de Octubre University Hospital.
- Course on the Safe Use of Medication in the Madrid Health Service
- Expert in Physiotherapy and Sports Rehabilitation, Isabel I of Castile International University

#### Dr. Jimenez Hernández, Daniel

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

### Course Management | 25 tech

#### Ms. Pino Giráldez, Mercedes

- Attending Rehabilitation Physician, 12 de Octubre University Hospital
- Specialist in Physical Medicine and Rehabilitation, University Hospital of Guadalajara
- Specialist in Childhood Disability, Complutense University of Madrid
- Degree in Medicine and Surgery, University of Alcalá de Henares
- MIR Physical Medicine and Rehabilitation
- Medical Rehabilitation Specialist, Jiménez Díaz Foundation Hospital
- Attending Rehabilitation Physician, Rey Juan Carlos I Hospital
- Attending Rehabilitation Physician, Torrejón de Ardoz Hospital
- Attending Rehabilitation Physician, University Hospital of Guadalajara

#### Mr. Soto Bagaria, Luis

- Physiotherapist and Researcher, Parc Sanitari Pere Virgili
- Master's Degree in Neuromusculoskeletal Physiotherapy
- Member of the research team on aging, frailty and transitions at Re-Fit BCN
- More than 10 years working in the field of aging

## 05 Structure and Content

The syllabus was developed by adhering to the criteria of educational effectiveness that TECH offers. Through a comprehensive syllabus, the student will cover all the essential learning areas proposed, gradually acquiring the skills required to put this knowledge into practice. A well-developed learning scheme that will allow you to learn in a continuous, efficient and customized way.

A comprehensive teaching program, structured in well-developed teaching units, and oriented towards learning that is compatible with your personal and professional life"

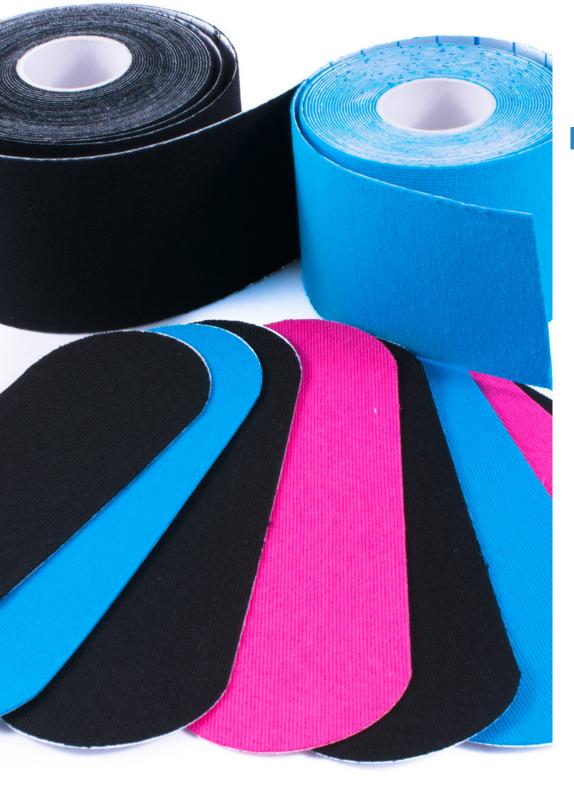
## tech 28 | Structure and Content

#### Module 1. Clinical Reasoning in Geriatric Physiotherapy

- 1.1. Past, Present and Future of Geriatric Physiotherapy
  - 1.1.1. Brief History
    - 1.1.1.1. Origin of the Discipline beyond Our Borders
    - 1.1.1.3. Conclusions
  - 1.1.2. Current State of Geriatric Rehabilitation Medicine
  - 1.1.3. Future of Geriatric Rehabilitation Medicine 1.1.3.1. New Professional Technologies
- 1.2. Active Aging
  - 1.2.1. Introduction
  - 1.2.2. Concept of Active Aging
  - 1.2.3. Classification
  - 1.2.4. Active Aging from the Patient's Point of View
  - 1.2.5. Role Played by Physical Communication Management in Active Aging Programs
  - 1.2.6. Example of Intervention
- 1.3. Update on Geriatric Rehabilitation Medicine and Scope of Performance
  - 1.3.1. Introduction and Definitions
  - 1.3.2. Fields of Action
    - 1.3.2.1. Nursing Homes
    - 1.3.2.2. Socio-Sanitary
    - 1.3.2.3. Primary Care
    - 1.3.2.4. Work Discipline in Palliative Care Units
  - 1.3.3. Future Areas in Geriatric Medicine
    - 1.3.3.1. New Technologies
    - 1.3.3.2. Physiotherapy and Architecture
  - 1.3.4. Interdisciplinary Teams in Geriatrics
    - 1.3.4.1. Multidisciplinary or Interdisciplinary Teams?
    - 1.3.4.2. Composition and Functioning of the Interdisciplinary Team
    - 1.3.4.3. Main Functions within the Interdisciplinary Team

- 1.4. Differential Diagnosis: Red and Yellow Flag Checklist
  - 1.4.1. Introduction and Definitions
    - 1.4.1.1. Differential Diagnosis
    - 1.4.1.2. Diagnosis in Physical Medicine and Rehabilitation
    - 1.4.1.3. Geriatric Syndromes
    - 1.4.1.4. Red and Yellow Flag Checklist
  - 1.4.2. Most Common Red Flags in Clinical Practice
    - 1.4.2.1. Urinary Infection
    - 1.4.2.2. Cancer
    - 1.4.2.3. Heart Failure
    - 1.4.2.4. Fractures
- 1.5. Approach to the Update on the Geriatric Rehabilitation Medicine Session
  - 1.5.1. Geriatric Patient Examination and Assessment 1.5.1.1. Assessment Components
    - 1.5.1.2. Most Commonly Used Scales and Tests
  - 1.5.2. Determining Treatment Objectives
  - 1.5.3. Organizing Treatment Sessions
  - 1.5.4. Organizing Professional Work
  - 1.5.5. Monitoring Treatment in Elderly Patients
- 1.6. Pharmacology, Effects on the Neuromusculoskeletal System
  - 1.6.1. Introduction
    - 1.6.1.1. Medication that Affects Gait
  - 1.6.2. Medication and Risk of Falls

## Structure and Content | 29 tech



#### Module 2. Person-Centered Care (PCC)

- 2.1. Definition, Concepts and Basic Principles
  - 2.1.1. The Ten Commandments in PCC
    - 2.1.1.1. What PCC Is and What It Isn't: Principles
    - 2.1.1.2. Clarifying Concepts: Glossary of Terms
    - 2.1.2. Origin and Conceptual Principles of PCC2.1.2.1. Psychological Principles2.1.2.2. Social Intervention Principles2.1.2.3. Quality of Life Benchmarks
      - 2.1.2.4. Principles based on the Study of Disability
      - 2.1.2.6. Principles based on Gerontological Resources
- 2.2. The PCC Model
  - 2.2.1. Paradigm and Intervention Model
- 2.3. Best Practices in PCC
  - 2.3.1. Definition and Concept of Best Practices
  - 2.3.2. Best Practices
  - 2.3.3. Best Practices, the Path to the Best Practice
  - 2.3.4. Key Best Practices
- 2.4. The Process of Transformation from a Service Model to a PCC Model
  - 2.4.1. How to Build an Apprenticeship?
  - 2.4.2. Transformation of Services
  - 2.4.3. Transformation of People
- 2.5. Service Provision in a PCC Model
  - 2.5.1. Person-Centered Physiotherapy vs. Individualized Physiotherapy
  - 2.5.2. Epistemology of Person-Centered Physiotherapy
- 2.6. Actions
  - 2.6.1. Introduction

## tech 30 | Structure and Content

- 2.6.2. Actions
  - 2.6.2.1. Professional Reception
  - 2.6.2.2. Assessment and Evaluation Processes
  - 2.6.2.3. Intervention
  - 2.6.2.4. Interrelationship with Co-Workers
  - 2.6.2.5. Interrelation with the Physical Environment
  - 2.6.2.6. Interrelation with the Community

#### Module 3. Understanding Fragility

- 3.1. Comprehensive Vision of Fragility
- 3.1.1. Introduction
- 3.1.2. Definitions of Fragility
- 3.1.3. Pathophysiological Principles of Frailty3.1.3.1. Activation of Inflammation and Coagulation Processes
  - 3.1.3.2. Comorbidity
  - 3.1.3.3. Malnutrition and Sarcopenia
- 3.1.4. Frailty as a Syndrome
- 3.1.5. Interventions and Models of Care
- 3.2. Tools for Comprehensive Geriatric Assessment of Frailty
  - 3.2.1. Introduction
  - 3.2.2. Comprehensive Geriatric Assessment
  - 3.2.3. Frailty Assessment Scales
  - 3.2.4. Conclusions
  - 3.2.5. Learning Points
- 3.3. Frailty Assessment in Rehabilitation Medicine
  - 3.3.1. Initial Interview
  - 3.3.2. Highlighted Tests
    - 3.3.2.1. Specific Tests for Frailty
    - 3.3.2.2. Fall Risk Test
    - 3.3.2.3. Dual Tasks

- 3.3.2.4. Strength Test
- 3.3.2.5. Cardiopulmonary Capacity Test 3.3.2.6. Functional Tests
- 3.3.3. Parameter Calculation
- 3.3.4. Summary
- 3.4. Prescribing Physical Activity in Frail Patients
  - 3.4.1. General Aspects
  - 3.4.2. Individual Exercise Prescription 3.4.2.1. Heating
    - 3.4.2.2. Strength/Power
    - 3.4.2.3. Balance
    - 3.4.2.4. Aerobic Endurance
    - 3.4.2.5. Stretching
  - 3.4.3. Group Dynamics in Frail or Pre-Frail Patients 3.4.3.1. Heating
  - 3.4.4. Summary
- 3.5. Therapeutic Adherence in the Prescription of Physical Activity
  - 3.5.1. Factors of Non-Adherence
    - 3.5.1.1. Socio-Economic Factors
    - 3.5.1.2. Health System or Care
    - 3.5.1.3. Disease
    - 3.5.1.4. Treatment
    - 3.5.1.5. Critical
  - 3.5.2. Adherence Strategies
    - 3.5.2.1. ICT
  - 3.5.3. Summary
- 3.6. Fall Assessment
  - 3.6.1. Risk Factors for Falls
  - 3.6.2. Diagnosis of Falls
    - 3.6.2.1. Specific Fall Risk Diagnostic Tests

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- 3.6.3. Consequences of Falls
- 3.6.4. Containment to Prevent Falls
  - 3.6.4.1. Side Effects of Containment
    - 3.6.4.2. Adapted Containment
    - 3.6.4.3. Environmental and Verbal Restraints
    - 3.6.4.4. Types of Containments
- 3.6.5. Post-Fall Treatment
- 3.6.6. Summary
- 3.7. Transitions
  - 3.7.1. Justification of Programs in Transitions
  - 3.7.2. Limitations in Care Transitions
  - 3.7.3. What Is Meant by Care Transitions?
  - 3.7.4. An Example of Pre-Discharge Service: Transition Coaches
  - 3.7.5. Nursing Frailty Assessment at Discharge
    - 3.7.5.1. Communication Techniques
    - 3.7.5.2. Motivational Interview
    - 3.7.5.3. PCC: Health Goals for the Elderly
- 3.8. Principles of PCC
- 3.9. Patient Empowerment at Discharge
  - 3.9.1. Adherence to Pharmacological Treatment
  - 3.9.2. The Teach Back Method Tool 3.9.2.1. Introducing Active Lifestyles in the Elderly
    - 3.9.2.2. Nutritional Habits in the Elderly
    - 3.9.2.3. Promoting Person-Centered Self-Care
  - 3.9.3. Coordination between Levels of Care for Continuity of Care with the Community
  - 3.9.4. Monitoring after Discharge through Intermediate Care Hospitals

#### Module 4. Professional Approach to Patients Affected by Cognitive Impairment

- 4.1. Introduction to Cognitive Impairment
  - 4.1.1. Cognitive Impairment
    - 4.1.1.1. Definition and Epidemiology
    - 4.1.1.2. Risk Factors
    - 4.1.1.3. Diagnostics
    - 4.1.1.4. Treatment
      - 4.1.1.4.1. Non-Pharmacological Treatment
      - 4.1.1.4.2. Pharmacological Treatment
  - 4.1.2. Dementia
    - 4.1.2.1. Epidemiology
    - 4.1.2.2. Pathogenesis and Risk Factors
    - 4.1.2.3. Clinical Manifestations
    - 4.1.2.4. Evolution
    - 4.1.2.5. Diagnostics
    - 4.1.2.6. Differential Diagnosis
      - 4.1.2.6.1. Mild Cognitive Impairment: Already Explained Previously
      - 4.1.2.6.2. Acute Confusional State or Delirium

4.1.2.6.3. Subjective Memory Complaints and Age-Associated Memory Impairment

- 4.1.2.6.4. Affective Disorders-Depression-Depressive Pseudodementia
- 4.1.2.7. Severity of Dementia
- 4.1.2.8. Treatment
  - 4.1.2.8.1. Non-Pharmacological Treatment
  - 4.1.2.8.2. Pharmacological Treatment
- 4.1.2.9. Comorbidity-Mortality

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- 4.2. Types of Cognitive Impairment: Possible Classifications
  - 4.2.1. Utility of the Cognitive Impairment Classification
  - 4.2.2. Types of Classification
    - 4.2.2.1. According to Degree of Affectation
    - 4.2.2.2. According to Progression
    - 4.2.2.3. According to Age of Onset
    - 4.2.2.4. According to Clinical Syndrome
    - 4.2.2.5. According to Etiology
- 4.3. Causes and Effects of Cognitive Impairment
  - 4.3.1. Introduction
  - 4.3.2. Risk Factors for Cognitive Impairment
  - 4.3.3. Causes of Cognitive Impairment4.3.3.1. Primary Neurodegenerative Etiology4.3.3.2. Vascular Etiology4.3.3.3. Other Etiologies
  - 4.3.4. Effects of Cognitive Impairment
    4.3.4.1. Inattention and Lack of Concentration
    4.3.4.2. Memory Impairment
    4.3.4.3. Language Impairment
    4.3.4.4. Apraxia
    4.3.4.5. Agnosia
    4.3.4.6 Executive Eunction Disorders
    - 4.3.4.7. Visuospatial Function Disorders
    - 4.3.4.8. Behavioral Disorders
    - 4.3.4.9. Perception Disorders
  - 4.3.5. Conclusions

- 4.4. Individual and Group Rehabilitation Medicine Approach
  - 4.4.1. Rehabilitation Medicine in Dementia
  - 4.4.2. Professional Assessments
  - 4.4.3. Therapeutic Objectives
  - 4.4.4. Therapeutic Interventions from Physiotherapy
    - 4.4.4.1. Physical Exercise
    - 4.4.4.2. Individual Therapy
    - 4.4.4.3. Group Therapy
    - 4.4.4.4. Rrehabilitation Medicine in Cognitive Impairment Stages4.4.4.5. Gait and Balance Impairment
  - 4.4.5. Adherence to Treatment-Family
- 4.5. Tools to Connect
  - 4.5.1. Introduction
  - 4.5.2. Difficulties Encountered with Disoriented and/or Disconnected Users
  - 4.5.3. How to Access the Disoriented and/or Disconnected User4.5.3.1. Music as a Tool for Working with People with Dementia4.5.3.1.1. Application of Music in People Affected by Dementia
    - 4.5.3.2. Animal-Assisted Therapy (AAT)
      - 4.5.3.2.1. Application of AAT in People Affected by Dementia
      - 4.5.3.2.2. Structure of Sessions
      - 4.5.3.2.3. Materials
      - 4.5.3.2.4. The Dog
      - 4.5.3.2.5. Examples of AAT Application
    - 4.5.3.3. Yoga and Mindfulness
      - 4.5.3.3.1. Yoga
      - 4.5.3.3.2. Mindfulness
      - 4.5.3.3.3. Application of Mindfulness

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#### 4.6. Basal Stimulation

- 4.6.1. Origin of Basal Stimulation
- 4.6.2. Definition of Basal Stimulation
- 4.6.3. Indications of Basal Stimulation
- 4.6.4. Basic Principles of Basal Stimulation 4.6.4.1. Advantages of Basal Stimulation
- 4.6.5. Basic Needs
  - 4.6.5.1. Requirements of Basal Stimulation
  - 4.6.5.2. Basic Areas of Perception
- 4.6.6. Body Identity and Environment
- 4.6.7. Global
  - 4.6.7.1. Communication
- 4.7. Sharing of Knowledge, Interdisciplinary Approach to the Affected Person
- 4.7.1. Introduction
- 4.7.2. Biopsychosocial Model as a Reference
- 4.7.3. Multidisciplinarity and Interdisciplinarity
- 4.7.4. Areas of Intervention: Levels of Care
  - 4.7.4.1. Primary Care
  - 4.7.4.2. Specialized Care
  - 4.7.4.3. Social Healthcare
  - 4.7.4.4. Other Professionals
  - 4.7.4.5. Integrative Health: A Holistic View
- 4.7.5. Community Intervention
- 4.7.6. Conclusions

#### Module 5. Pain and Aging, Update According to Current Scientific Evidence

- 5.1. Anatomy and Physiology of Pain Transmission
  - 5.1.1. Peripheral Elements
  - 5.1.2. Nociceptors
  - 5.1.3. Nociceptor Depolarization
  - 5.1.4. Peripheral Sensitization of Nociceptors
- 5.2. Dorsal Ganglion
  - 5.2.1. Spinal Cord
  - 5.2.2. Posterior Horn
- 5.3. Ascending Pain Pathways
  - 5.3.1. Brain
  - 5.3.2. Concept of Pain Matrix
  - 5.3.3. Brain Areas Related to Pain
  - 5.3.4. Descending Pain Pathways
  - 5.3.5. Top-Down Inhibition
  - 5.3.6. Top-Down Facilitation
- 5.4. Types of Pain
  - 5.4.1. Introduction
  - 5.4.2. Temporality
    - 5.4.2.1. Acute Pain
    - 5.4.2.2. Chronic Pain
  - 5.4.3. Pathophysiology
    - 5.4.3.1. Nociceptive Pain
    - 5.4.3.2. Somatic Pain
    - 5.4.3.3. Visceral Pain
    - 5.4.3.4. Neuropathic Pain
    - 5.4.3.5. Nociceptive vs. Neuropathic Pain

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5.4.4. Central Sensitization

5.4.4.1. C-Fiber-Mediated Wind-Up Response

- 5.4.4.2. Long-Term Enhancement
- 5.4.4.3. Changes in the Phenotype of Posterior Horn Neurons and Apoptosis of GABAergic Neurons and Aberrant Connections
- 5.4.4.4. Excitatory Changes in the Cerebral Cortex
- 5.5. Pain and Aging
  - 5.5.1. Aging
  - 5.5.2. Characteristics of Aging
  - 5.5.3. Prevalence
  - 5.5.4. Physiological Changes of Aging
  - 5.5.5. Physical and Neurological Changes with Impact on Pain Chronification 5.5.5.1. Differences in Pain Perception
    - 5.5.5.2. Increased Chronic Inflammation in Aging
    - 5.5.5.3. Disruption of the Circadian Rhythm in Aging
    - 5.5.5.4. Neurodegeneration and Implications for Learning
    - 5.5.5.5. Elderly Depression
    - 5.5.5.6. Sedentary Lifestyle and Frailty in the Elderly
    - 5.5.5.7. Under-Recognized and Under-Treated Pain
- 5.6. Pain Syndromes in Geriatrics
  - 5.6.1. Introduction
  - 5.6.2. Cervical Osteoarthritis
  - 5.6.3. Occipital Neuralgia
  - 5.6.4. Cervicogenic Dizziness
  - 5.6.5. Vertebral Fracture due to Osteoporosis
  - 5.6.6. Lumbar Osteoarthritis and Facet Syndrome
  - 5.6.7. Central Canal Stenosis in the Lumbar Spine
  - 5.6.8. Hip Osteoarthritis
  - 5.6.9. Shoulder Rotator Cuff Rupture
  - 5.6.10. Knee Osteoarthritis

- 5.7. Pain Assessment
  - 5.7.1. Introduction
  - 5.7.2. Communicative Framework: Communicative Skills during the Interview5.7.2.1. Beginning of the Session: Welcoming5.7.2.2. Interview: Identifying Reasons for the Consultation
    - 5.7.2.3. Closing of the Session: Farewell
  - 5.7.3. Main Problems in Communicating with the Elderly
    - 5.7.3.1. Medical History
    - 5.7.3.2. Clinical Characteristics of Pain
    - 5.7.3.3. Localization and Quality
    - 5.7.3.4. Chronology and Behavior
  - 5.7.4. Current and Previous Treatments
  - 5.7.5. Pain in Patients with Cognitive Impairment
  - 5.7.6. Scales for Assessing Pain
    - 5.7.6.1. One-Dimensional Scales
    - 5.7.6.2. Multi-Dimensional Scales
  - 5.7.7. Musculoskeletal Examination
  - 5.7.8. Observation and Visual Inspection
  - 5.7.9. Pain Area Examination
  - 5.7.10. Movement and Muscle Assessment
  - 5.7.11. Joint Assessment
  - 5.7.12. Muscular Strength Assessment
- 5.8. Pharmacological Treatment of Pain in Geriatric Patients
  - 5.8.1. Pain Medication
  - 5.8.2. NSAIDs
  - 5.8.3. Coxibs
  - 5.8.4. Paracetamol
  - 5.8.5. Metamizole
  - 5.8.6. Opioid Medication
  - 5.8.7. Phytotherapy
  - 5.8.8. Adjuvant Medication

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#### 5.9. Pain Treatment

- 5.9.1. Introduction
- 5.9.2. Approaching Pain
- 5.9.3. Response Problems in Passive Manual Therapy When It Is the Only Treatment
- 5.9.4. Integrating Pain Mechanisms, Function, Impairment, and Psychosocial Factors
  - 5.9.4.1. Integrating Pain Inhibition Mechanisms
  - 5.9.4.2. Integrating Function and Impairment
  - 5.9.4.3. Integrating Psychosocial Factors
- 5.9.5. Mature Organism Model
- 5.9.6. Integrated or Multimodal Treatment Strategies
  - 5.9.6.1. Educational
  - 5.9.6.2. Guide to Explain Pain
  - 5.9.6.3. Manual Therapy
  - 5.9.6.4. Mechanical Stimulus
- 5.9.7. Peripheral Mechanism
- 5.9.8. Spinal Mechanisms
- 5.9.9. Supraspinal Mechanisms
- 5.9.10. Therapeutic Exercise and Physical Reactivation
  - 5.9.10.1. Resistance Exercise
  - 5.9.10.2. Aerobic Exercise
  - 5.9.10.3. Multimodal Exercise
  - 5.9.10.4. Aquatic Exercise

#### Module 6. Update on Support Devices for Personal Autonomy

- 6.1. Support Product Definition
  - 6.1.1. Framework and Definition of Support Product 6.1.1.1. ISO 9999
    - 6.1.1.2. EASTIN
  - 6.1.2. Which Characteristics Must Each Support Product Comply With? SP
  - 6.1.3. Success in Optimal Support Product Advice
- 6.2. Update on the Different Support Devices for Daily Life Activities
  - 6.2.1. Facilitating Devices for Feeding
  - 6.2.2. Dressing Aids
  - 6.2.3. Facilitating Devices for Hygiene and Personal Care
- 6.3. Update on Different Pressure-Dissipating Devices for Pressure Ulcer Prevention
  - 6.3.1. Sitting
  - 6.3.2. Supine Position
  - 6.3.3. Pressure Blanket Evaluation System
- 6.4. Update on the Various Devices to Facilitate Transfers and Mobilizations
  - 6.4.1. Transfers and Mobilizations
    - 6.4.1.1. Common Errors
    - 6.4.1.2. Basic Guidelines for the Correct Use of the Different Devices
  - 6.4.2. Device Upgrades
- 6.5. Advances in the Different Devices Designed to Facilitate Mobility and Correct Positioning
  - 6.5.1. General Framework
  - 6.5.2. Mobility Devices in Geriatrics
    - 6.5.2.1. Tilting Chair
    - 6.5.2.2. Scooter
    - 6.5.2.3. Electronic Driving Wheelchair
    - 6.5.2.4. Relocation Assistance
    - 6.5.2.5. Rear Walker
  - 6.5.3. Positioning Devices in Geriatrics6.5.3.1. Back Support6.5.3.2. Headrest

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- 6.6. Personalized Devices for the Control of Wanderers, Close Care
  - 6.6.1. Definition of Close Care or Control of Wanderers
  - 6.6.2. Differences between Close Care and Telecare
  - 6.6.3. Objectives of Close Care or Wander Control
  - 6.6.4. Components of the Close Care Devices
  - 6.6.5. Simple Wanderer Control Devices for Home Environments
  - 6.6.6. Adaptation of the Environment to Facilitate Wanderer Orientation
  - 6.6.7. Summary
- 6.7. Support Products for Recreation, Taking Advantage of Current Technologies
  - 6.7.1. The Importance of SP Standardization
  - 6.7.2. Support Products for Furniture
    - 6.7.2.1. Sanitary Furniture
    - 6.7.2.2. Living Room Furniture
    - 6.7.2.3. Bedroom Furniture
    - 6.7.2.4. Environmental Control
- 6.8. Update on Accessibility Support Products and Architectural Barrier Removal Products
  - 6.8.1. Framework for the Abolition of Architectural Barriers and Universal Access to Housing
  - 6.8.2. Support Products for the Removal of Architectural Barriers in the Home 6.8.2.1. Ramps
    - 6.8.2.2. Lift Chairs
    - 6.8.2.3. Inclined Elevated Platform
    - 6.8.2.4. Overhead Crane
    - 6.8.2.5. Short Travel Ladder Platform
    - 6.8.2.6. Lifting Platform
    - 6.8.2.7. Stair Climbing Devices
    - 6.8.2.8. Convertible Ladder
  - 6.8.3. Support Products for the Removal of Architectural Barriers in Vehicles6.8.3.1. Specific Vehicle Adjustments
    - 6.8.3.2. Carony
    - 6.8.3.3. Turny-Turnout

- 6.9. New Technology for the Creation of Low-Cost Support Products
  - 6.9.1. 3D Printing
    - 6.9.1.1. What Is 3D Printing Technology?
    - 6.9.1.2. 3D Applications
  - 6.9.2. Leisure Support Products6.9.2.1. Use of Commercial Technology in Geriatrics6.9.2.2. Use of Specialized Technology in Geriatrics6.9.2.3. Public Geriatric Parks

## **Module 7.** Traumatology, Neurology, Pelvic Floor and Respiratory Conditions in the Elderly: Searching for Evidence

- 7.1. Physiotherapy in Fractures and Dislocations in the Elderly
  - 7.1.1. Fractures in the Elderly
    - 7.1.1.1. General Concepts of Fractures
    - 7.1.1.2. Main Fractures in the Elderly and Treatment
    - 7.1.1.3. Most Frequent-Surgical Complications
  - 7.1.2. Dislocation in the Elderly
    - 7.1.2.1. Introduction and Immediate Handling
    - 7.1.2.2. Main Dislocation in the Elderly and Treatment
    - 7.1.2.3. Most Frequent Surgical Complications
- 7.2. Hip, Knee and Shoulder Arthroplasty
  - 7.2.1. Arthrosis
  - 7.2.2. Rheumatoid Arthritis
  - 7.2.3. Rehabilitation Medicine in Hip Arthroplasty
  - 7.2.4. Rehabilitation Medicine in the Preoperative Phase
  - 7.2.5. Rehabilitation Medicine in the Postoperative Phase
  - 7.2.6. Rehabilitation Medicine in Knee Arthroplasty
  - 7.2.7. Rehabilitation Medicine in the Preoperative Phase
  - 7.2.8. Fast-Track in Hip and Knee Arthroplasty
  - 7.2.9. Rehabilitation Medicine in Shoulder Arthroplasty
  - 7.2.10. Anatomic Total Shoulder Arthroplasty

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- 7.3. Rehabilitation Medicine in Amputees
  - 7.3.1. Multidisciplinary Team in Amputees
  - 7.3.2. Importance of Prosthetic Knowledge
  - 7.3.3. Amputee Patient Assessment
  - 7.3.4. Physicians in Prosthetic Rehabilitation Programs
    - 7.3.4.1. Perioperative Phase
    - 7.3.4.2. Pre-Prosthetic Phase
  - 7.3.5. Patient Education
  - 7.3.6. Long-Term Management of the Amputee Patient
- 7.4. Approach to Acute, Subacute and Chronic Stroke Patients
  - 7.4.1. Definition, Classification, Early Detection and Initial Hospital Management
  - 7.4.2. Guiding Principles in Neurophysiotherapy
  - 7.4.3. Outcome Measurement Scales after Stroke
  - 7.4.4. Assessment and Treatment According to the Evolutionary Stage of the Disease
    - 7.4.4.1. Acute Phase
    - 7.4.4.2. Subacute Phase
    - 7.4.4.3. Chronic Phase
  - 7.4.5. Management of Frequent Complications
    - 7.4.5.1. Spasticity
    - 7.4.5.2. Contractures
    - 7.4.5.3. Shoulder Pain and Subluxation
    - 7.4.5.4. Falls
    - 7.4.5.5. Fatigue
    - 7.4.5.6. Other Fundamental Problems: Cognitive, Visual, Communicative, Swallowing, Continence, etc.
  - 7.4.6. Beyond Rehabilitation Discharge

- 7.5. New Trends for Parkinson's Disease Patients
  - 7.5.1. Definition, Epidemiology, Pathophysiology and Diagnosis of PD
  - 7.5.2. Global Management of the Person with PD
  - 7.5.3. History of Physical Therapy and Physical Examination
  - 7.5.4. Goal Setting in People with PD
  - 7.5.5. Physiotherapy Treatment in PD
  - 7.5.6. Falls in PD, Towards a New Approach Model?
  - 7.5.7. Self-Management and Information for Caregivers
- 7.6. Urinary Incontinence and Chronic Urinary Retention
  - 7.6.1. Definition of Urinary Incontinence
  - 7.6.2. Types of Urinary Incontinence
    - 7.6.2.1. Clinical Classification 7.6.2.2. Urodynamic Classification
  - 7.6.3. Therapeutics of Urinary Incontinence and Overactive Bladder
  - 7.6.4. Urinary Retention
  - 7.6.5. Rehabilitation Medicine in Urinary Incontinence and Chronic Urinary Retention
- 7.7. Respiratory Medicine in COPD
  - 7.7.1. Definition, Etiology, Pathophysiology and Consequences
  - 7.7.2. Diagnosis and Classification
  - 7.7.3. Caring for a Patient with COPD
    - 7.7.3.1. Treatment in Stable Phase
    - 7.7.3.2. Treatment in Exacerbations
- 7.8. Neurological Conditions
  - 7.8.1. Introduction
  - 7.8.2. Nervous Disorders Associated with Respiratory Problems
  - 7.8.3. Rehabilitation Medicine for Nervous Disorder Respiratory Problems
  - 7.8.4. Respiratory Warning Signs

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#### Module 8. Tools Used in Daily Practice in Geriatrics

- 8.1. Communication, a Tool for the Success of Physical Therapy Treatment
  - 8.1.1. Introduction
    - 8.1.1.1. The Mirror and the Lamp
  - 8.1.2. Communication in the Framework of the Therapeutic Relationship 8.1.2.1. Definitions
    - 8.1.2.2. Basic Aspects
    - 8.1.2.2.1. Components
    - 8.1.2.2.2. Context
    - 8.1.2.2.3. Impossibility of Not Communicating
  - 8.1.3. Codes in Messages
    - 8.1.3.1. Specific Aspects of Communication with Elderly Patients
    - 8.1.3.2. Main Problems in Communicating with the Elderly
    - 8.1.3.3. Communication with the family
    - 8.1.3.4. The Therapeutic Relationship as a Special Form of Social Interaction
    - 8.1.3.5. Model for Communication Training
- 8.2. Bereavement in Professionals
  - 8.2.1. Why Talk About Grief?
  - 8.2.2. What is Grief?
  - 8.2.3. Is Grief Depression?
  - 8.2.4. How Is Grief Manifested during the Mourning Period?
  - 8.2.5. How Does the Mourning Period Unfold?
  - 8.2.6. How Will We React to the Loss of a Patient?
  - 8.2.7. When Does Mourning End?
  - 8.2.8. What Is Complicated Grief?
  - 8.2.9. When You're the Mourner: First Tools
  - 8.2.10. When Someone Else Is the Mourner: How to Console
  - 8.2.11. When to Ask for Help or Refer to a Psychologist?





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- 8.3. Elderly-Centered ICT
  - 8.3.1. ICT and Health 8.3.1.1. Specific Terminology 8.3.1.1.1. Information and Communication Technologies (ICT) 8.3.1.1.2. (e-Health) 8.3.1.1.3. (m-Health) 8.3.1.1.4. Telemedicine 8.3.1.1.5. Wearables 8.3.1.1.6. Gamification 8.3.1.1.7. (e-Doctor) 8.3.1.1.8. (e-Patient) 8.3.1.1.9. Digital Health 8.3.1.1.10. Digital Divide 8.3.1.1.11. Infoxication 8.3.2. 'E-Physiotherapy' in Geriatrics 8.3.2.1. The Generational Digital Divide 8.3.2.2. ICT Prescription in Update on Geriatric Rehabilitation Medicine

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 knowledge of geriatric rehabilitation medicine"

# 06 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"

## tech 42 | 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. 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.

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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:

 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.
- 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.



## tech 44 | Methodology

#### **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 | 45 tech

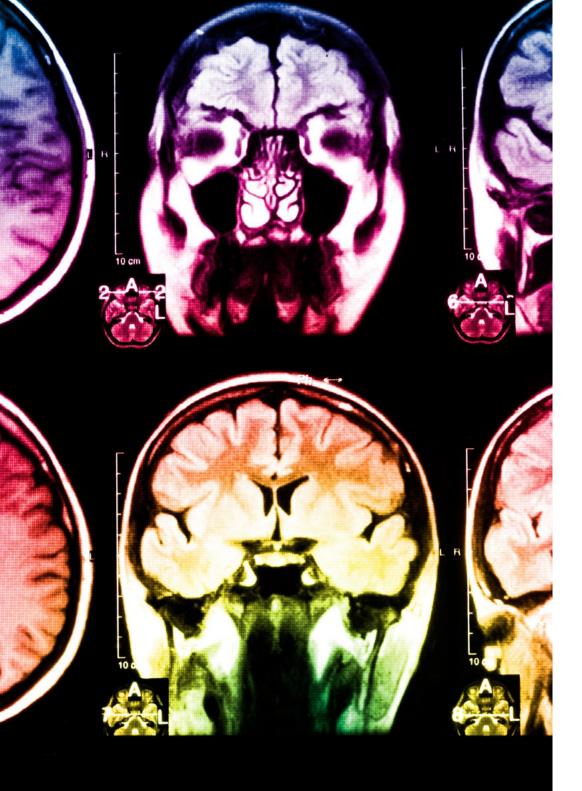
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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 46 | 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.

20%

15%

3%

15%

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.

## Methodology | 47 tech



#### **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.

20%

7%

3%

17%



#### **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.



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.

## 07 **Certificate**

The Professional Master's Degree in Geriatric Rehabilitation Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Global University.

Certificate | 49 tech

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

## tech 50 | Certificate

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Geriatric Rehabilitation Medicine** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics. This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Professional Master's Degree in Geriatric Rehabilitation Medicine

Modality: **online** Duration: **12 months** 

Accreditation: 60 ECTS



\*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.

tech global university **Professional Master's** Degree Geriatric Rehabilitation Medicine » Modality: online » Duration: 12 months » Certificate: TECH Global University » Credits: 60 ECTS » Schedule: at your own pace » Exams: online

## **Professional Master's Degree** Geriatric Rehabilitation Medicine

