



# Postgraduate Certificate

Cardiorespiratory System

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/cardiorespiratory-system

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### tech 06 | Introduction

Primary care is the most elementary health care and, at the same time, the most important area for health promotion, disease prevention and control in early stages.

Physiotherapists are part of a multidisciplinary team made up of a wide variety of professionals, so they must know how the system works in order to adapt quickly to it. It is important, in turn, to master the theoretical-practical content of their specialty in order to deliver effective and quality work.

Each of our professors works in a different specialty and has a different educational background, which, together with their experience in the sector, will make the content more varied, considering different points of view and always oriented toward students expanding their knowledge regardless of their background.

What makes this program different from the rest is the collaborative work put into the different specialties that make up the theoretical-practical content, including up to date studies and analyses in Primary Care.

This Postgraduate Certificate seeks to guide physiotherapists through the functions required in Primary Care, as well as to provide them with therapeutic tools and essential knowledge useful for professional work.

This **Postgraduate Certificate in Cardiorespiratory System** offers the characteristics of a high level scientific, teaching, 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 practicing 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



Get up to date on all the latest developments in the field of physiotherapy by completing the most effective online Postgraduate Certificate available on the market in this field"



An effective and reliable Postgraduate Certificate that will take you through an interesting and efficient learning process so you acquire all the knowledge of an expert in the field"

Our teaching staff is made up of working professionals. In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of professionals train and experience in different environments, who will develop the theoretical knowledge in an efficient way, but above all, they will bring their practical knowledge from their own experience to the program: one of the differential qualities of this training.

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this course. Developed by a multidisciplinary 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 your 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, we will use telepractice learning: 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 actually dealing with the scenario they are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

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"

With a methodological design based on proven teaching techniques, this program will take you through different teaching approaches to allow you to learn in a dynamic and effective way.







# tech 10 | Objectives



### **General Objectives**

- Know how to frame the physiotherapist in Primary Care
- Accumulate the necessary knowledge for good professional practice within the Health System
- Broaden the necessary tools to face the demands faced in physiotherapy room and take a holistic approach to treatment
- Design preventive work to improve patient quality of life and promote a correct use of the Health System

Highly specialized objectives in a qualification created to train the best professionals in Physiotherapy in Primary Care.





### Objectives | 11 tech



### **Specific Objectives**

- Provide knowledge and theoretical foundations of cardiopulmonary anatomy
- Study the relation with other nearby systems and their modifications
- Develop a way of assessing patients more holistically than structurally
- Assess the functionality of cardiopulmonary exercises and include them among common treatments
- Become deeply familiar with patient portfolios presenting these affectations in Primary Care, as well as the evaluation and treatment criteria
- Analyze the role played by respiratory physiotherapy during the COVID-19 pandemic

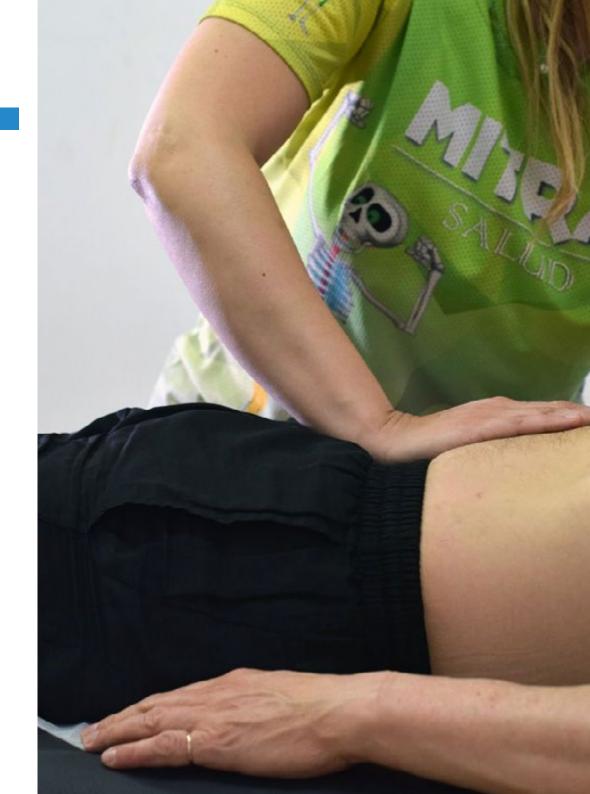




### tech 14 | Structure and Content

### Module 1. Cardiorespiratory System

- 1.1. Anatomical and Physiological Basis of the Respiratory and Cardiac Systems
- 1.2. Types of Respiratory Pathologies
- 1.3. Evaluation of the Respiratory System
- 1.4. Respiratory Physiotherapy Techniques in Primary Care: Ventilation Reeducation
- 1.5. Respiratory Physiotherapy Techniques in Primary Care: Secretion Drainage
- 1.6. Respiratory Physiotherapy Techniques in Primary Care: Cardiorespiratory Training and Directed Exercises
- 1.7. Respiratory Physiotherapy Techniques in Primary Care: Aerosols and Mechanical Ventilators
- 1.8. Treating Obstructive Pathologies
- 1.9. Treating Restrictive Pathologies
- 1.10. Physiotherapy in Primary Care and COVID-19









A comprehensive teaching program, structured in well developed units, oriented toward a high impact learning and training experience"



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.



# tech 18 | 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.





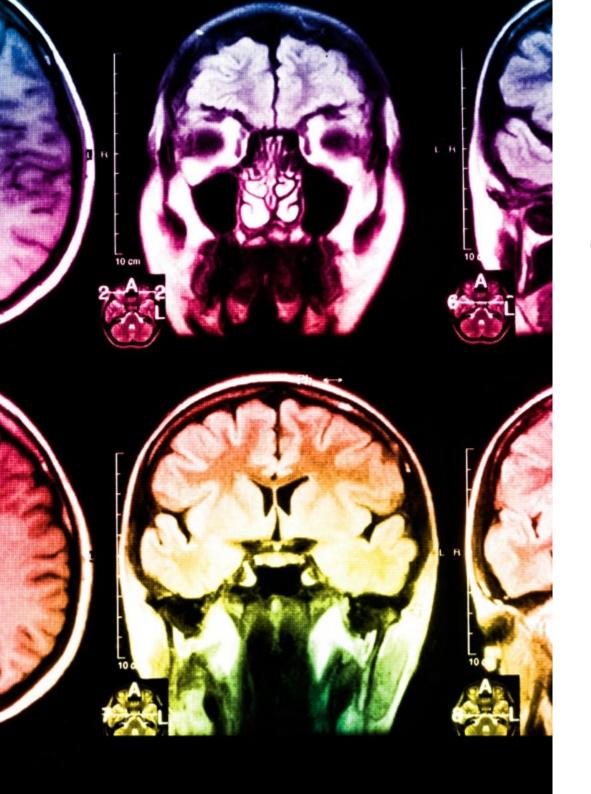
### **Relearning Methodology**

At TECH we enhance the 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 | 21 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 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 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 22 | 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**

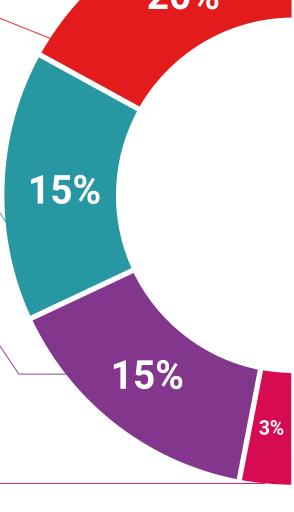
TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can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



#### Classes

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

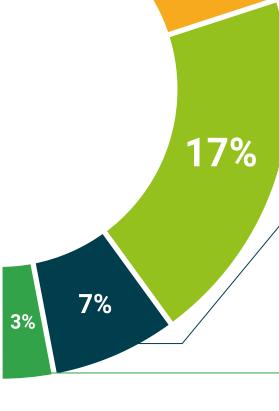
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **Quick Action Guides**

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





20%





### tech 26 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Cardiorespiratory System** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Cardiorespiratory System

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Cardiorespiratory System

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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



<sup>\*</sup>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



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