Postgraduate Certificate

Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation

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Postgraduate Certificate

Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Accreditation: **6 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/pathophysiologic-consequences-copd-pulmonary-constraint-respiratory-rehabilitation

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01

Introduction

COPD has a prevalence of around 10% of the population. Caused by different causes that will be developed in this program, together with the correct management of these pathologies and their approach through the different techniques, subsequent to a correct evaluation to effectively define the therapeutic practice. Throughout these weeks, special importance will be given to training in this type of pathology.

A Postgraduate Certificate created for physiotherapy professionals, which will allow you to combine your education with other occupations and access from anywhere with total flexibility"

Respiratory physiotherapy is part of physiotherapy, but focusing on the pathophysiology of the respiratory system, both medical and surgical, requiring a demanding knowledge of the respiratory system and the existing techniques for its treatment, healing and stabilization.

The disciplinary consideration of respiratory physiotherapy with a scientific- technical basis began in the late twentieth century, thanks to technological advances that allow measuring respiratory work and techniques, and is currently becoming necessary and essential in different hospital units. Therefore, it is essential that physical therapists update their knowledge in respiratory physiotherapy and acquire new techniques and tools to apply in their daily practice.

Physiotherapy is considered one of the therapeutic pillars in the management of patients with lung diseases, whether obstructive or restrictive, chronic or acute.

The increase in the incidence of respiratory pathologies that we are going to see during this program, both in children and adults, considerably affects the quality of life of the patients who suffer from them, as well as our health system, with a high social and economic cost due to hospitalization days, sick leave and early death.

The Postgraduate Certificate' has a teaching staff specialized in respiratory physiotherapy, who contribute both their practical experience in their day-to-day work in private practice, as well as their lengthy experience in teaching at national and international level. In addition, it has the advantage of being a 100% online training, so the students can decide from where to study and at what time to do it, in this way, they can flexibly self-direct their study hours.

This **Postgraduate Certificate in Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation** 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 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-assessment 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

A complete and practical Postgraduate Certificate that will allow you to learn everything you need to work as a physiotherapist in a real and direct way"

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

Our teaching staff is made up of working professionals. This way, we ensure that we provide you with up-to-date knowledge, which is what we are aiming for. A multidisciplinary team of specialized and experienced professionals in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will put at the service of the program the practical knowledge derived from their own experience: one of the differential qualities of this program.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. 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 education.

The design of this program is based on Problem-Based Learning: an approach that views 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*, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

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

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Objectives

This program has been developed from start to finish to become a tool for personal and professional growth for physiotherapists. Its objective is to take you through a training course that will allow you to acquire the most up-to-date knowledge and techniques for the most advanced and competitive practice in this field.

With a real practical objective, this Postgraduate Certificate will allow you to achieve your goals by boosting your CV to excellence"

General Objectives

- Promote specialist knowledge of respiratory physiotherapy
- Update knowledge and manage physiotherapy in different patients with respiratory pathologies
- Have knowledge of the pathophysiology and advanced exploration of the respiratory system
- Execute, direct and coordinate the Respiratory Physiotherapy intervention plan for each patient

Specific Objectives

- In-depth study of the causes of COPD
- Managing COPD pathology
- Use the different techniques for a correct assessment
- Manage the different respiratory trainings
- In-depth knowledge of the different rehabilitation programs for respiratory diseases

Highly specialized objectives in a program created to train the best professionals in Respiratory Physiotherapy"

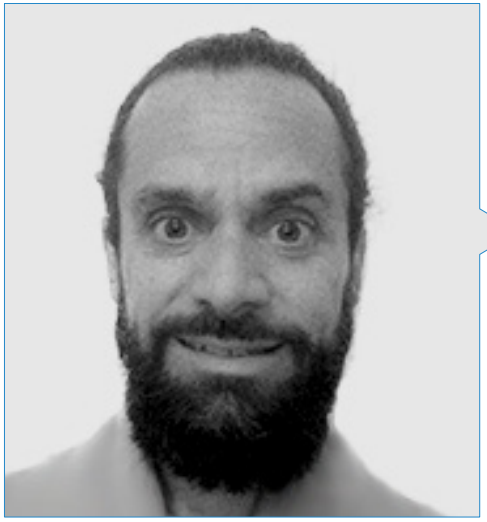
03

Course Management

Within the concept of total quality of our program, we are proud to put at your disposal a Teaching Staff of the highest level, chosen for their proven experience. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.

With the expertise of industry professionals who will teach you based on the reality of the sector in a contextual and realistic learning"

Management



Dr. García Coronado, Luis Pablo

- Physiotherapist at La Paz University Hospital
- Supervisor of the Physiotherapy Department at La Paz University Hospital.
- Specialist in sports Physiotherapy, Re-training, electrotherapy, Pilates and Therapeutic exercise.
- Director at Fisioespaña C. B
- Director at Fisioganas S.L.
- Director at Pilates Wellness & Beauty S.L.

Professors

Ms. Peroy Badal, Renata

- Physiotherapist in charge of Respiratory Rehabilitation for COPD patients, Hospital Virgen de la Torre
- Respiratory physiotherapy in critical patients admitted to the ICU and in pre- and postoperative patients undergoing abdominal surgery discharged from the inpatient unit.
- Respiratory physiotherapy in adult and pediatric patients with spinal cord injuries and different neuromuscular pathologies associated with respiratory disorders
- Degree in Physiotherapy: 1996-1999 Gimbernat University School of Nursing and Physiotherapy (Autonomous University of Barcelona)
- Graduate in Physiotherapy: 2013-2014 Complutense de Madrid with the dissertation "Health Education in Respiratory Rehabilitation in COPD in primary care"
- Official Master's Degree in Respiratory and Cardiac Physiotherapy: 2015-2016, ONCE University School of Physiotherapy (Complutense University of Madrid)
- D.U EN KINESITHERAPIE RESPIRATORIE ET CARDIOVASCULAIRE: 2007-2008, Claude Bernard-lyon Univeristy with the thesis "Education before upper abdominal surgery: co-construction of a patient-therapist booklet".

04

Structure and Content

The contents of this Postgraduate Certificate have been developed by the different teachers of this program, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this field.

A complete and well-structured program that will take you to the highest standards of quality and success.

A very complete syllabus that will take you gradually through each and every one of the learning processes that the Respiratory Physiotherapy professional needs. With an added bonus: the commitment to excellence that characterizes us"

Module 1. Pathophysiological Consequences of COPD Pulmonary Restriction and Respiratory Rehabilitation

1.1. Prevalence of COPD and Chronic Respiratory Diseases
  1.1.1. Prevalence of COPD in Spain (BORRAR)
  1.1.2. Prevalence of COPD Globally
1.2. COPD
  1.2.1. COPD Definition
  1.2.2. COPD Treatment
1.3. Respiratory Rehabilitation
  1.3.1. Definition of Respiratory Rehabilitation
  1.3.2. Components of Respiratory Rehabilitation
1.4. Assessment of the Respiratory Patient Before, During and After Respiratory Rehabilitation
  1.4.1. Dyspnea Evaluation
  1.4.2. Assessment of Exercise Tolerance
  1.4.3. Assessment of Respiratory Muscle Strength
1.5. Exercise Training
  1.5.1. Overload
  1.5.2. Specificity
  1.5.3. Adaptation
1.6. Aerobic Training
  1.6.1. Parts of the Aerobic Training Session
  1.6.2. FIIT Principle
  1.6.3. How Should a Training Session Be Carried Out?
1.7. Muscle Strengthening
  1.7.1. Assessment of Peripheral Musculature
  1.7.2. How Should a Training Session Be Carried Out?
1.8. Respiratory Muscle Training

1.8.1. Devices for Strengthening the Respiratory Musculature
1.8.2. How Should a Training Session Be Carried Out?
1.9. Physical Activity
1.9.1. Physical Exercise Evaluation
1.9.2. Physical Activity Adherence
1.10. Respiratory Rehabilitation Programs in Respiratory Diseases other than COPD
1.10.1. Programs in Pulmonary Fibrosis
1.10.2. Bronchiectasis Programs

A comprehensive teaching program, structured in very well-developed teaching units, oriented towards high-impact learning"

05

Methodology

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

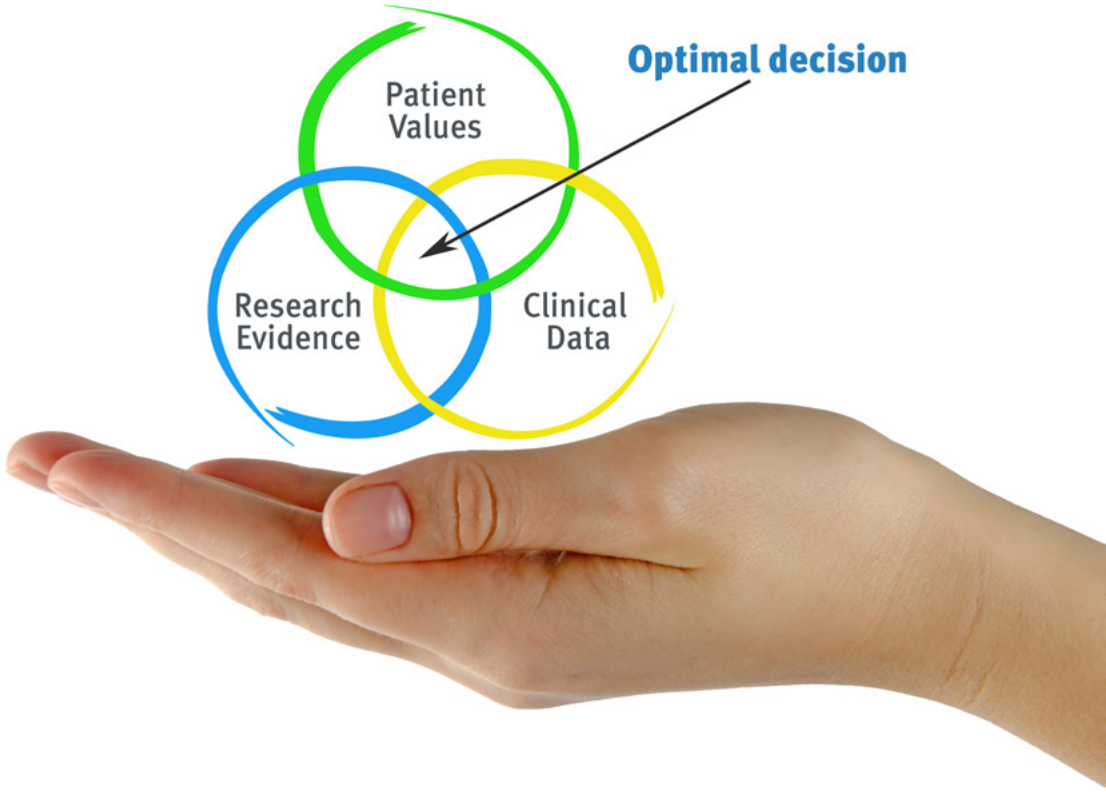
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.

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. Physiotherapists/kinesiologists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions of professional physiotherapy practice.

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

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

1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.

2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate into the real world.

3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.

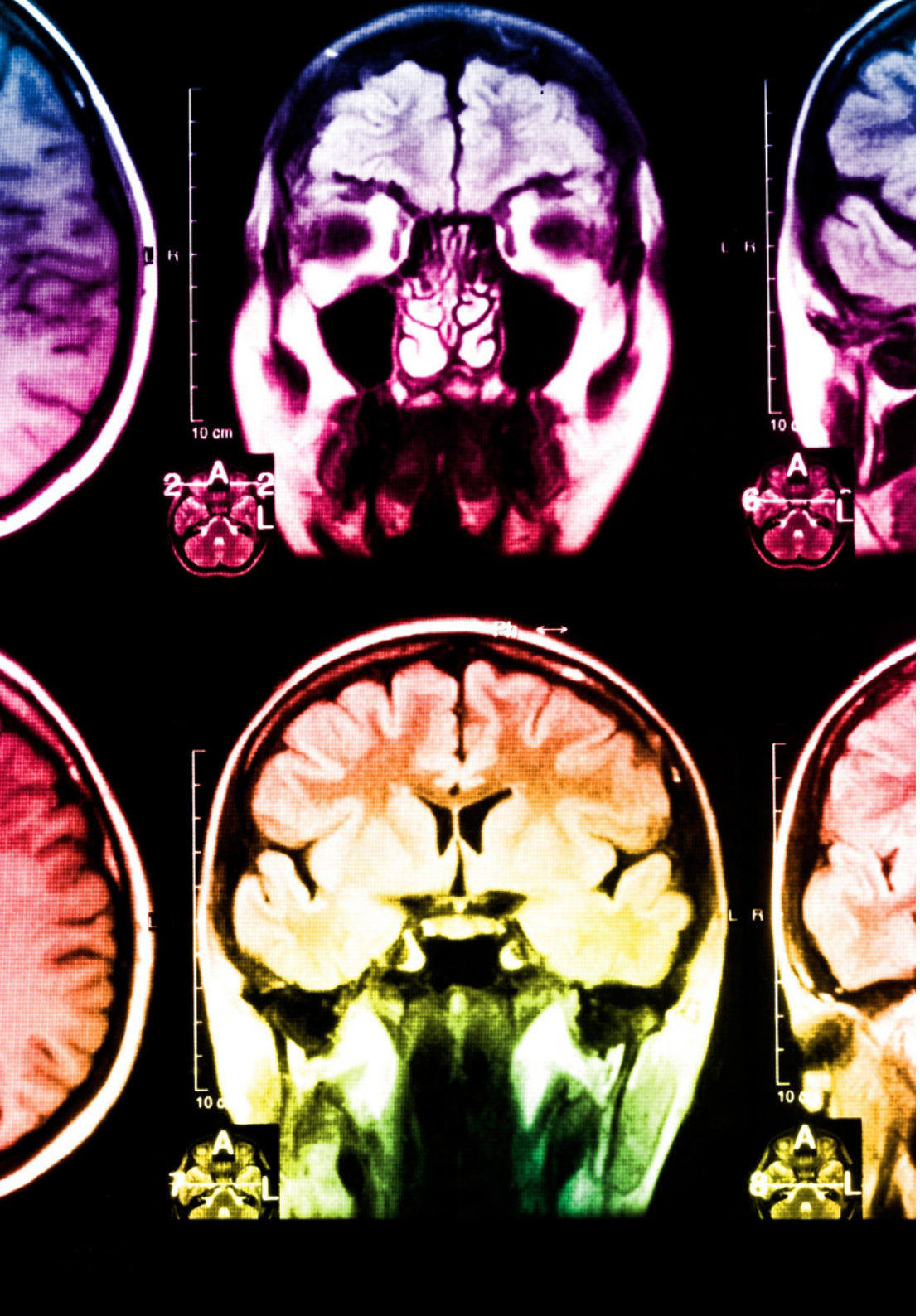
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

Relearning Methodology

At TECH, we enhance the Harvard case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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



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 enabled more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our educational 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 education, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

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

Study Material

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

These contents are then adapted in 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, students can watch them as many times as they want.

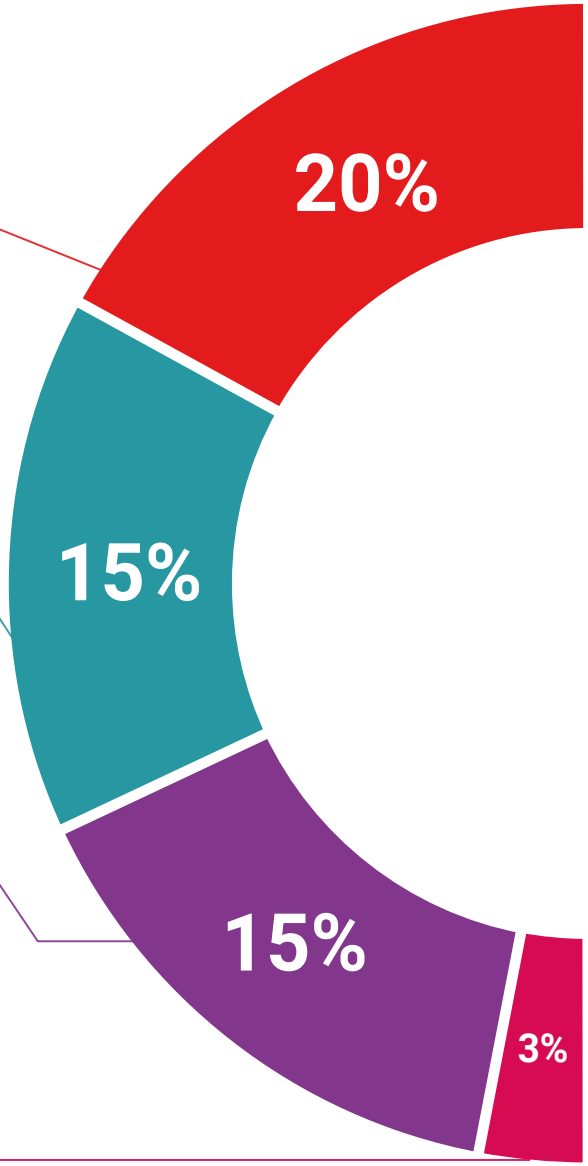
Interactive Summaries

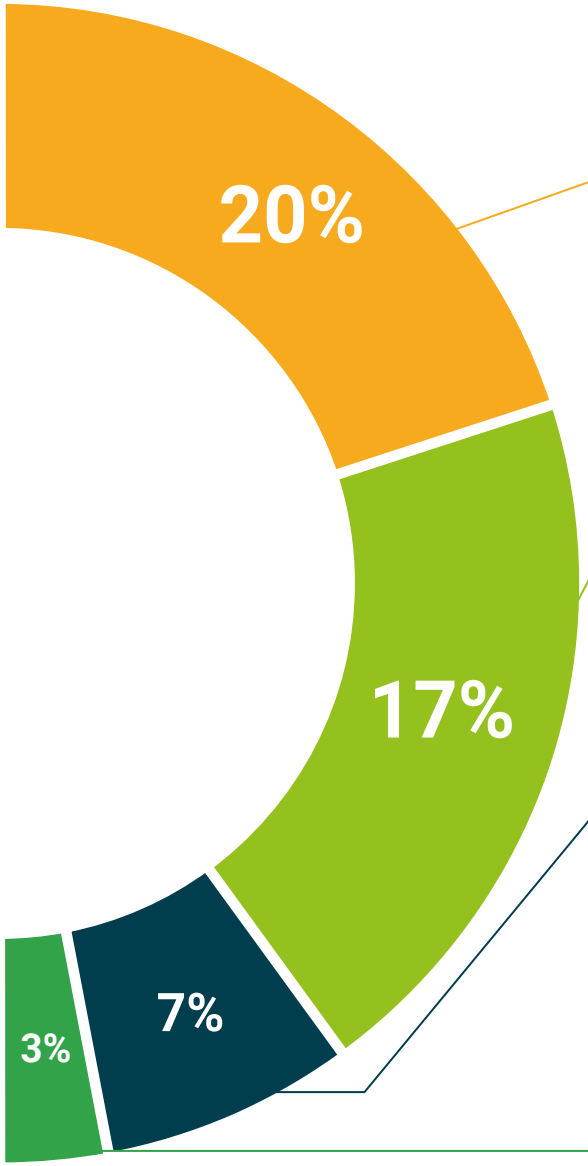
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This 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.





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 assess and re-assess 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.

06

Certificate

The Postgraduate Certificate in Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation guarantees you, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation** 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.

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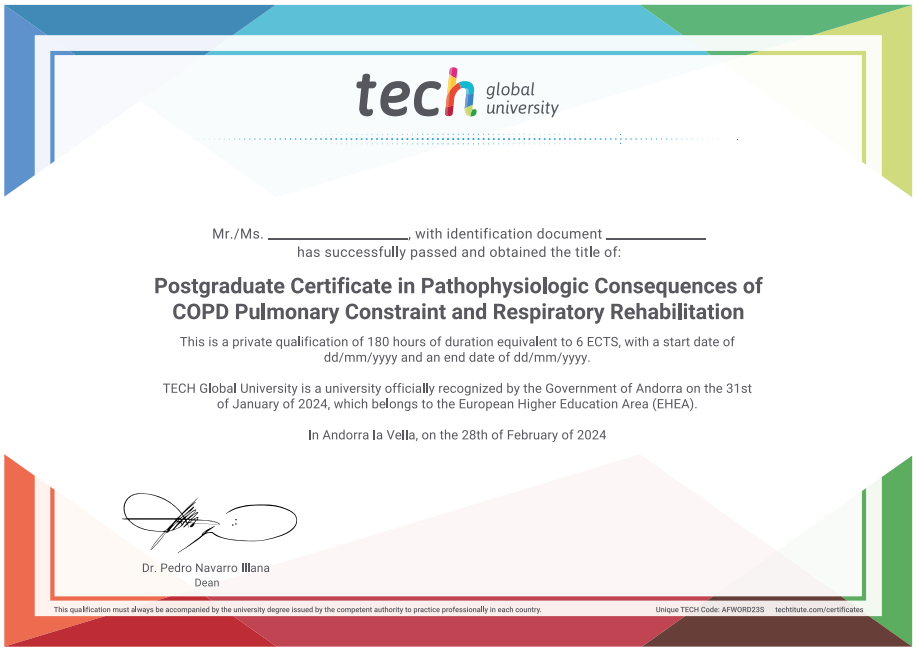
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Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Pathophysiologic Consequences of COPD Pulmonary Constraint and Respiratory Rehabilitation

This is a private qualification 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

Dr. Pedro Navarro Illana
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 Global University will make the necessary arrangements to obtain it, at an additional cost.

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