



Respiratory Physiotherapy in Covid

» 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-respiratory-physiotherapy-covid

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### tech 06 | Introduction

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 pulmonary diseases, whether obstructive or restrictive, chronic or acute.

The increase in the incidence of respiratory pathologies that we are going to see during this Postgraduate Certificate, 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 student can decide from where to study and at what time to do it, in this way, they can flexibly self-direct their study hours.

The Postgraduate Certificate in Respiratory Physiotherapy in Covid contains the most complete and updated scientific program on the market. The most important features of the course 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 course



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



An effective and reliable 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. In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of professionals trained and experienced in different environments, who will cover 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 course: one of the differential qualities of this course.

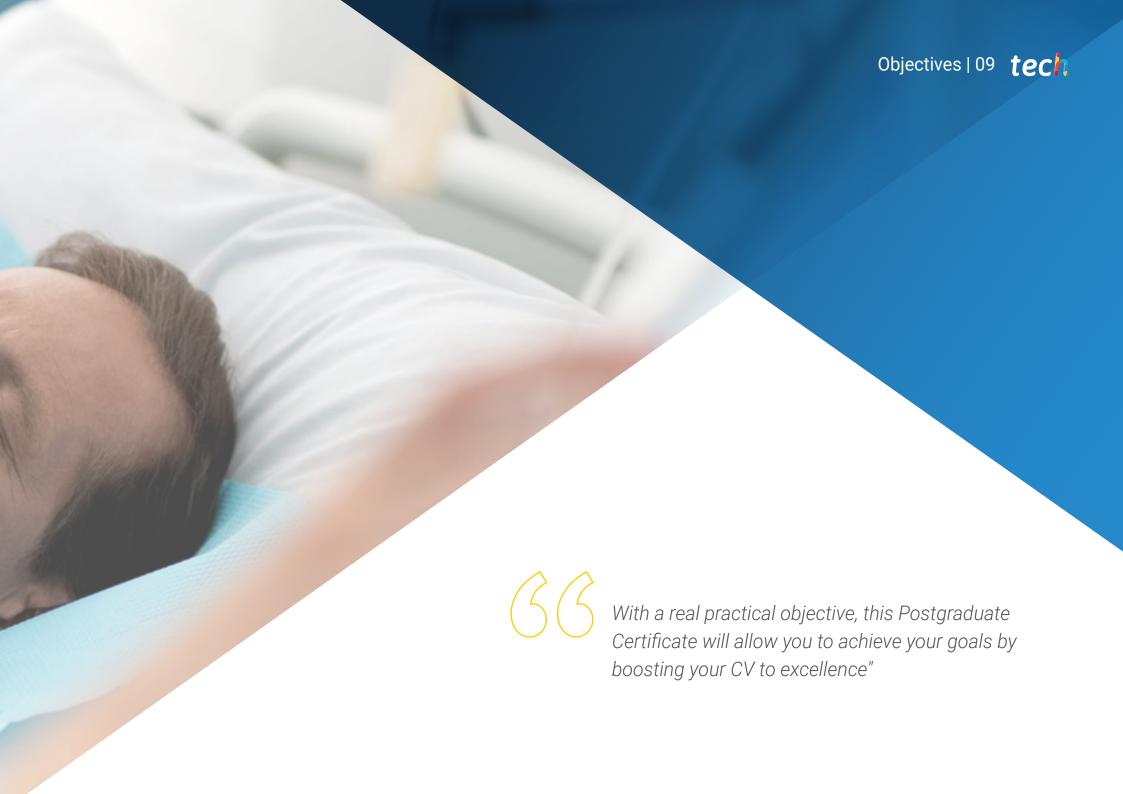
This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of 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 conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: with the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

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







# tech 10 | Objectives



# **General Objectives**

- Promote specialization in 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**

- Manage COVID-19 Respiratory Physiotherapy treatment in critical care units
- Apply the correct respiratory physiotherapy treatment in the ward
- Become familiar with new scenarios of physical therapy intervention in the post-COVID era

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







# tech 14 | Course Management

### Management



### Mr. 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.



# Course Management | 15 tech

### **Professors**

### Ms. Pérez-Esteban Luis-Yagüe, Teresa

- Physiotherapist at Gregorio Marañón General University Hospital. November 2019-20 septiembre 2020
- Specialist in Respiratory Physiotherapy. University of Castilla La Mancha-Toledo
- Master's Degree in Manual Physical Therapy of the Locomotor System. University of Alcalá-Madrid
- Degree in Physiotherapy. Pontificia University of Salamanca, Salus Infirmorum-Madrid
- Basic Radiology for Physical Therapists online course
- Therapeutic exercise update program by the Consejo Gral. Colegios de Fisioterapeutas de España (Spanish General Council of Physiotherapists' Associations)





# tech 18 | Structure and Content

### Module 1. Respiratory Physiotherapy in Covid

- 1.1. Introduction
  - 1.1.1. Covid-19. Origin
  - 1.1.2. Evolution of the Coronavirus Epidemic
  - 1.1.3. Confinement and Quarantine
- 1.2. Vision Development
  - 1.2.1. Clinical Picture
  - 1.2.2. Methods and Detection Tests and Analysis
  - 1.2.3. Epidemiological Curve
- 1.3. Aisilation and Protection
  - 1.3.1. P.P.E. Personal Protective Equipment
  - 1.3.2. Types of Masks and Respiratory Protection
  - 1.3.3. Hand Washing and Personal Hygiene
- 1.4. Pathophysiology in Covid-19
  - 1.4.1. Desaturation and Worsening From the Point Of View of Physiotherapy
  - 1.4.2. Complementary Tests
- 1.5. Patient Admitted to Hospital Pre-ICU/Post-ICU
  - 1.5.1. Risk Factors and Aggravating Factors
  - 1.5.2. Criteria for Admission to a Inpatient Unit
  - 1.5.3. Admission to Critical Care Unit
- 1.6. Critically III Covid-19 Patient
  - 1.6.1. Characteristics of Critical Patients Average Length of Stay
  - 1.6.2. Monitoring of Mechanical Ventilation Vmi/Vmni
  - 1.6.3. Weaning Methods in Case of Improvement of the Clinical Picture
- 1.7. After-effects of Critical Patients
  - 1.7.1. Barthel's Scale
  - 1.7.2. Dauci. Post-ICU Acquired Weakness
  - 1.7.3. Swallowing Disturbance
  - 1.7.4. Basal Hypoxemia





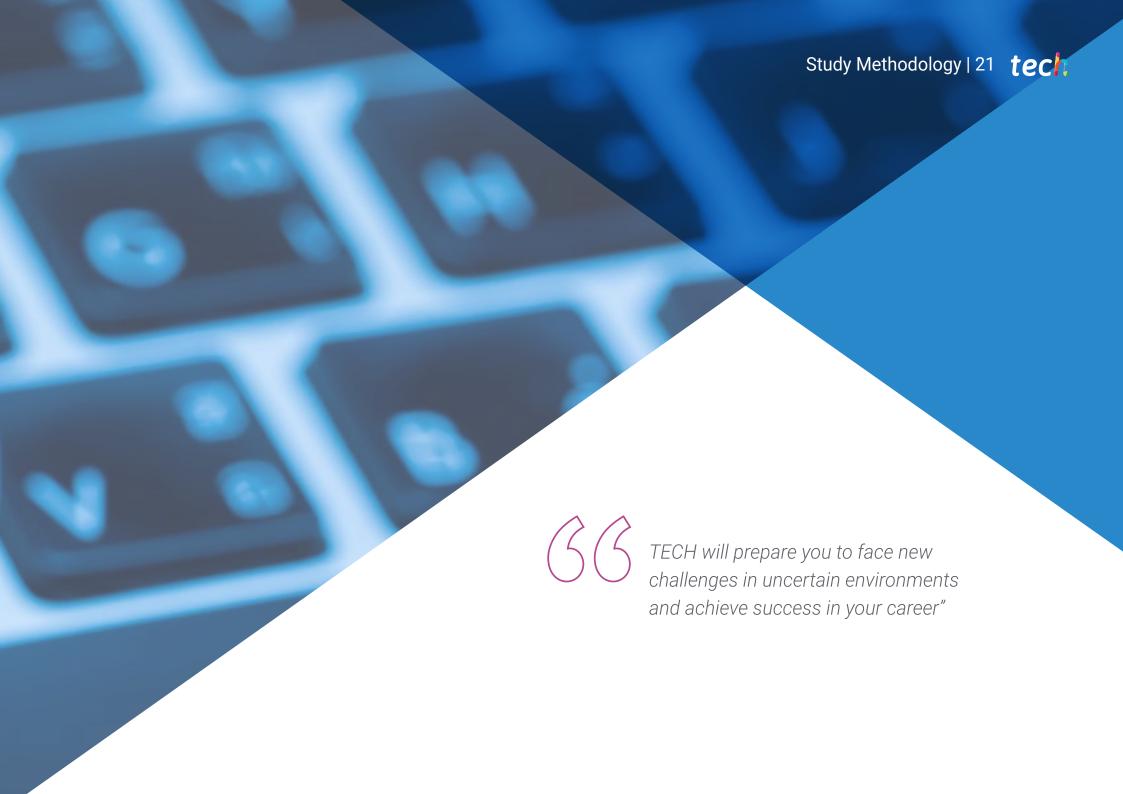
# Structure and Content | 19 tech

- 1.8. Separ Guide
  - 1.8.1. Research in Covid
  - 1.8.2. Scientific Articles and Literature Reviews
- 1.9. Respiratory Physiotherapy Treatment
  - 1.9.1. Respiratory Physiotherapy Treatment in Covid-19 Critical Care Units
  - 1.9.2. On-site Respiratory Physiotherapy Treatment.
  - 1.9.3. Discharge Recommendations
- 1.10. Post-Covid-19 Era
  - 1.10.1. New Scenarios in Physiotherapy Intervention
  - 1.10.2. Preventative Actions



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



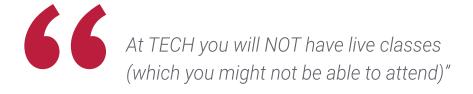


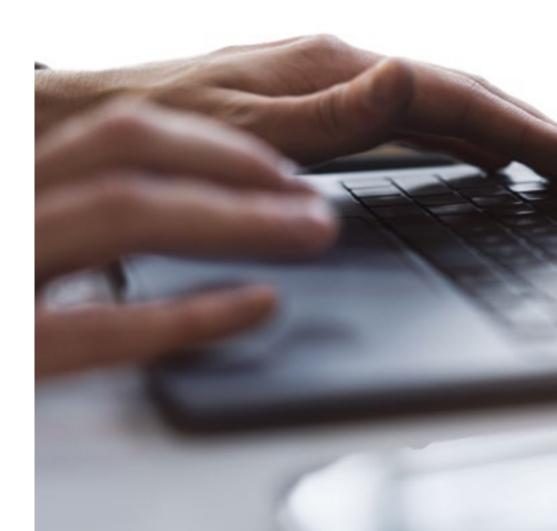
### The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.







### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.



TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"

# tech 24 | Study Methodology

#### Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



### Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



# tech 26 | Study Methodology

### A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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

- 1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- **4.** Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### Study Methodology | 27 tech

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:



#### **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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### **Practicing Skills and Abilities**

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### **Interactive Summaries**

We present 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, international guides... In our virtual library you will have access to everything you need to complete your education.

#### **Case Studies**

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

#### **Testing & Retesting**



We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

#### Classes



There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence for 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.







### tech 30 | Certificate

This private qualification will allow you to obtain a **Postgraduate Certificate in Respiratory Physiotherapy in Covid** 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: Postgraduate Certificate in Respiratory Physiotherapy in Covid

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_

#### Postgraduate Certificate in Respiratory Physiotherapy in Covid

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



tech global university

# Postgraduate Certificate Respiratory Physiotherapy in Covid » Modality: online

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

