

Postgraduate Certificate Physical Neuroeducation and Learning

Endorsed by the NBA



tech technological
university



Postgraduate Certificate Physical Neuroeducation and Learning

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/physiotherapy/postgraduate-certificate/physical-neuroeducation-learning

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01

Introduction

A new work perspective has emerged in recent years, physical neuroeducation, which integrates the importance of physical exercise with health in children's learning. In this way, the approaches of different scientific currents such as education and neurology are united. It is possible then to understand how, through physical activity, the development of knowledge occurs in children, from a scientific perspective. This is the main reason why the program focused on this field of action, preparing professionals to understand these processes and help children from an early age.



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Understand learning in a holistic way to ensure the motor development of your child patients”

Since the development of neuroeducation a few years ago, it has been consolidated as a discipline that studies the interaction of the environment in the learning process of the brain. In this way, it has become a new educational approach that encompasses different fields of knowledge. For physical therapists, it helps them learn about the importance of the external environment with motor development and mental health.

For all these reasons, the program was created around Physical Neuroeducation and Learning. This helps professionals to implement strategies for disease prevention and quality of life improvement in terms of cardiovascular and other risk diseases.

All the content is available in a 100% online Postgraduate Certificate that gives students the ease of being able to study it comfortably, wherever and whenever they want. Students will only need a device with internet access to take their career one step further. A modality according to the current times with all the guarantees to position professionals in a highly demanded sector.

This **Postgraduate Certificate in Physical Neuroeducation and Learning** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ◆ Practical cases presented by experts in Neuroeducation
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where self-assessment can be used to improve learning.
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



Understand holistic learning and ensure the motor and emotional development of the children in your care"

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Stay at the forefront of your profession and acquire the knowledge that will help you position yourself as an expert in child development"

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

This Postgraduate Certificate has the best educational material based on the latest scientific developments on the subject.

Understand the importance of physical activity in children's development and learning.



02 Objectives

The students will have a Postgraduate Certificate designed and conceived with the objective of providing them with the best education and knowledge in the field of physical neuroeducation. In this way, throughout each class, there will be an intensive education, where future graduates will be able to understand how sport and physical activity have a direct impact on the acquisition of knowledge in children. A unique professional growth opportunity designed only for those who want to be at the forefront of a growing profession.



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Learn about the main neurotransmitters and hormones that are related to psychomotor development”



General Objective

- ◆ Implementing the innovations of Neuroeducation in the subject of physical education

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Specialize by following a program designed to boost your professional career”





Specific Objectives

- ◆ Explain the relevance of body-brain language together with embodied cognition
- ◆ Establish the importance of mental health with exercise
- ◆ Explain the development of cognitive functions through the practice of physical exercise
- ◆ Know the positive influence of motor skills in students with learning difficulties

03

Course Management

Under the direction of an excellent group of professionals, who have come together to create an academic program of excellence, this Postgraduate Certificate includes everything students need to specialize in Physical Neuroeducation and Learning, perfectly meeting the demands of today's job market. This is what will ensure students the certainty of receiving the most up-to-date and comprehensive information, being able to put into practice almost instantaneously everything they learn in each class.



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The program puts theory into practice by following the examples of real cases dictated by professionals in the field of neuroscience.

Management



Ms. Pellicer Royo, Irene

- ◆ Degree in Physical Activity and Sports Science Master's Degree in Medical Sciences applied to Physical Activity and Sport
- ◆ Certificate in Management and Administration of Sports Entities
- ◆ Master's Degree in Emotional Education and Well-being
- ◆ Postgraduate in Neuroeducation Learning to our full potential

Professors

Dr. De la Serna, Juan Moisés

- ◆ Doctor in Psychology Master's Degree in Neurosciences and Behavioral Biology
- ◆ Director of the Open Chair of Psychology and Neurosciences and science communicator
- ◆ University Expert in Didactic Methodology
- ◆ University Specialist in Clinical Hypnosis
- ◆ Expert in Project Management Occupational Trainer

Dr. Navarro Ardoy, Daniel

- ◆ PhD. Applied Health Exercise Physiology
- ◆ Physical Activity and Health Program. Faculty of Medicine
- ◆ 6-month research stay at Karolinska Institute Stockholm (Sweden)
- ◆ Degree in Physical Activity and Sports Science

Ms. Rodríguez Ruiz, Celia

- ◆ Graduate in Pedagogy. Degree in Psychology
- ◆ Specialization in clinical psychology and child psychotherapy
- ◆ Specialization in Cognitive Behavioral Therapy in Childhood and Adolescence



04

Structure and Content

Following a theoretical-practical orientation, a series of multimedia materials have been designed to ensure that students receive in the most immersive way all the knowledge they need to specialize in this field. For this reason, the program of this Postgraduate Certificate is not only the most comprehensive in terms of knowledge, but also in terms of teaching. All this, from a global point of view for the sake of its application at an international level, incorporating all the fields of work involved in the development of professionals in this type of work environment.



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*Grow with a curriculum
full of quality content
designed by experts”*

Module 1. Physical Neuroeducation and Learning

- 1.1. Body-Brain Language and Embodied Cognition
 - 1.1.1. Conceptualization of Embodied Cognition
 - 1.1.2. Intelligent Behavior Based on Body-Brain-Environment Interaction
- 1.2. Mental Health and Exercise.
 - 1.2.1. What is Meant by Mental Health in this Context?
 - 1.2.2. The Evolutionary Purpose of Motor Action
 - 1.2.3. What if Movement Improved Brain Functioning?
- 1.3. Brain Development Through Physical Exercise
 - 1.3.1. Hippocampus and Basal Ganglia in Relation to Exercise
 - 1.3.2. The Development of the Prefrontal Cortex and Other Brain Structures due to Physical Exercise
- 1.4. Executive Attention and Exercise.
 - 1.4.1. The Cognitive Function of Attention
 - 1.4.2. Relationship Between Attention and Exercise
 - 1.4.3. Enhancing Attention
- 1.5. Working Memory in Motor Action.
 - 1.5.1. The Cognitive Function of Memory
 - 1.5.2. Working Memory
 - 1.5.3. Relationship Between Memory and Motor Action
 - 1.5.4. Enhancing Memory
- 1.6. Improvement of Cognitive Performance derived from Motor Action.
 - 1.6.1. Motor Action-Behavior Relationship
 - 1.6.2. Motor Action-Brain Health Relationship
- 1.7. Academic Results and their Relationship to Physical Practice.
 - 1.7.1. Academic Improvements as a Consequence of Motor Action
 - 1.7.2. Specific Interventions
 - 1.7.3. Prolonged Interventions
 - 1.7.4. Conclusions
- 1.8. Positive Influence of Motor Skills on Students with Learning Difficulties.
 - 1.8.1. The Brain in Special Educational Needs
 - 1.8.2. Attention Deficit Hyperactivity Disorder and Motor Action
 - 1.8.3. Specific Proposals for Motor Action





- 1.9. Pleasure, a Fundamental Element in Physical Neuroeducation
 - 1.9.1. Pleasure Systems in the Brain
 - 1.9.2. Relationship Between Pleasure and Learning
- 1.10. General Recommendations for the Implementation of Teaching Proposals.
 - 1.10.1. The Coherence of Action-Research
 - 1.10.2. Concrete Example of an Action-Research Proposal in Physical Neuroeducation
 - 1.10.3. Phases of the Working Process
 - 1.10.4. Criteria, Techniques and Strategies for the Collection of Information
 - 1.10.5. Approximate Schedule of the Planned Phases

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TECH motivates you to go beyond, that's why it will help you to take a University Course with the guarantees of fulfilling a professional profile at an international level"

05 Methodology

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

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





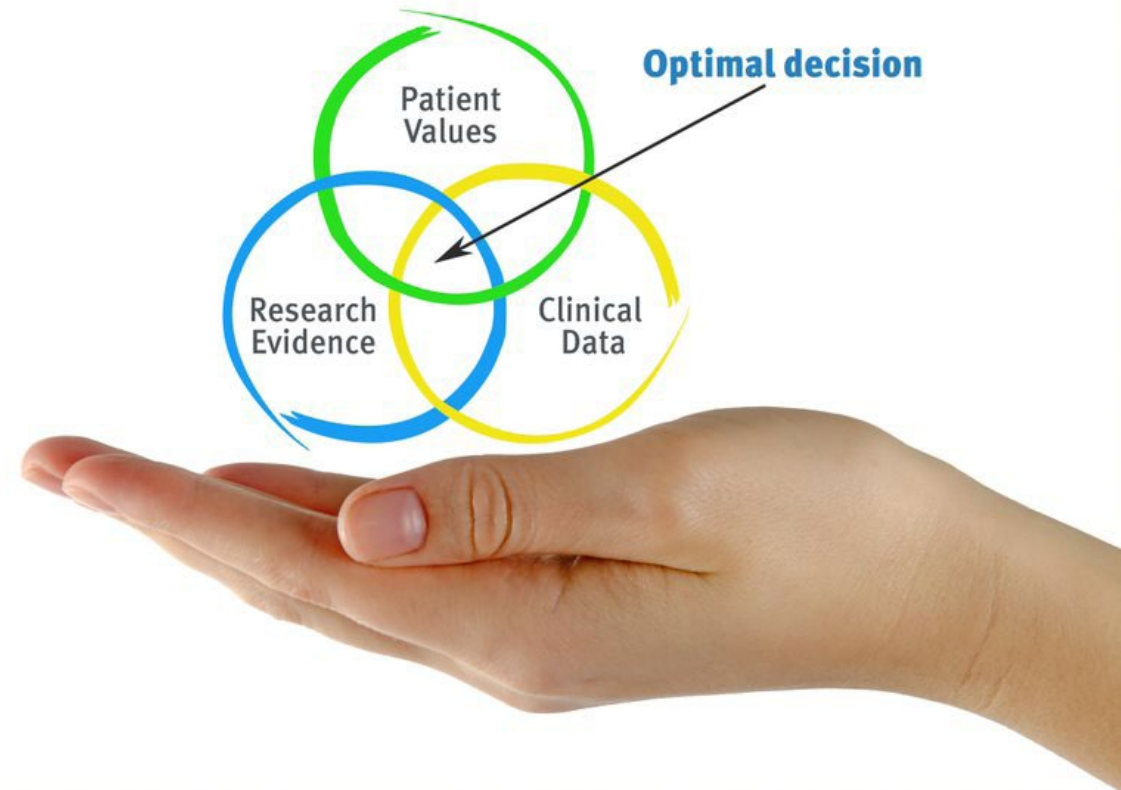
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

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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:

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.

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.



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.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system 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 Physical Neuroeducation and Learning guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in Physical Neuroeducation and Learning** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Physical Neuroeducation and Learning**

Official N° of Hours: **150 h.**

Endorsed by the NBA



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

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
virtual classroom



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