

Postgraduate Certificate

Neuroanatomy and Neurophysiology for Physiotherapy

Endorsed by the NBA





Postgraduate Certificate

Neuroanatomy and Neurophysiology for Physiotherapy

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/physiotherapy/postgraduate-certificate/neuroanatomy-neurophysiology-physiotherapy

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

The increase in the incidence of Acquired Brain Injury (ABI), especially stroke, and survival rates, make neurorehabilitation and, therefore, physiotherapy, essential specialties, since stroke is currently a leading cause of disability. This, coupled with the public's awareness of the need for specialized professionals, is leading to an increase in the demand for physiotherapists who are able to understand how the nervous system works after an injury and how to get the most out of it to minimize the after-effects of the injury.



“

This Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy will generate confidence in your practice, which will help you grow personally and professionally”

Furthermore, we are living a time of great advances in neuroscience, and physiotherapy as a science, which compels students to update their knowledge both of the functioning of the nervous system and how to evaluate and therapeutically approach ABI, since each injury is different and will manifest itself in a different way in each patient.

This Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy aims to be a compendium of the most up-to-date evidence and scientific knowledge of the nervous system and its rehabilitation when it is injured in an unexpected way. Thanks to this, the program is fully capable of providing specialist training to physiotherapists who have never dealt with ABI, but who are interested in steering their professional future towards treating this type of patient.

Likewise, professionals that are already neurological physiotherapists, whether or not they deal with ABI, will find the opportunity to update their knowledge and achieve a more advanced specialization in this type of patients.

And in gaining such an understanding of so much information on neuroscience and functionality, it can be a useful tool for physiotherapists whose target patient is not specifically suffering from ABI or a neurological pathology, yet needs to know the ins and outs of the nervous system to better understand and address the injury or therapeutic need of each patient.

This program helps professionals in this field to increase their ability to succeed, which results in better praxis and performance that will have a direct impact on educational outcomes, on the improvement of the educational system and on the social benefit for the whole community.

This **Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in Neuroanatomy and Neurophysiology for Physiotherapy
- ♦ 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
- ♦ The latest innovations in Neuroanatomy and Neurophysiology for Physiotherapy
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ A particular focus on innovative methodologies in Neuroanatomy and Neurophysiology for Physiotherapy
- ♦ Complementary 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



Update your knowledge with this Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy”

“

This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge of Neuroanatomy and Neurophysiology for Physiotherapy, you will obtain a qualification from TECH Global University”

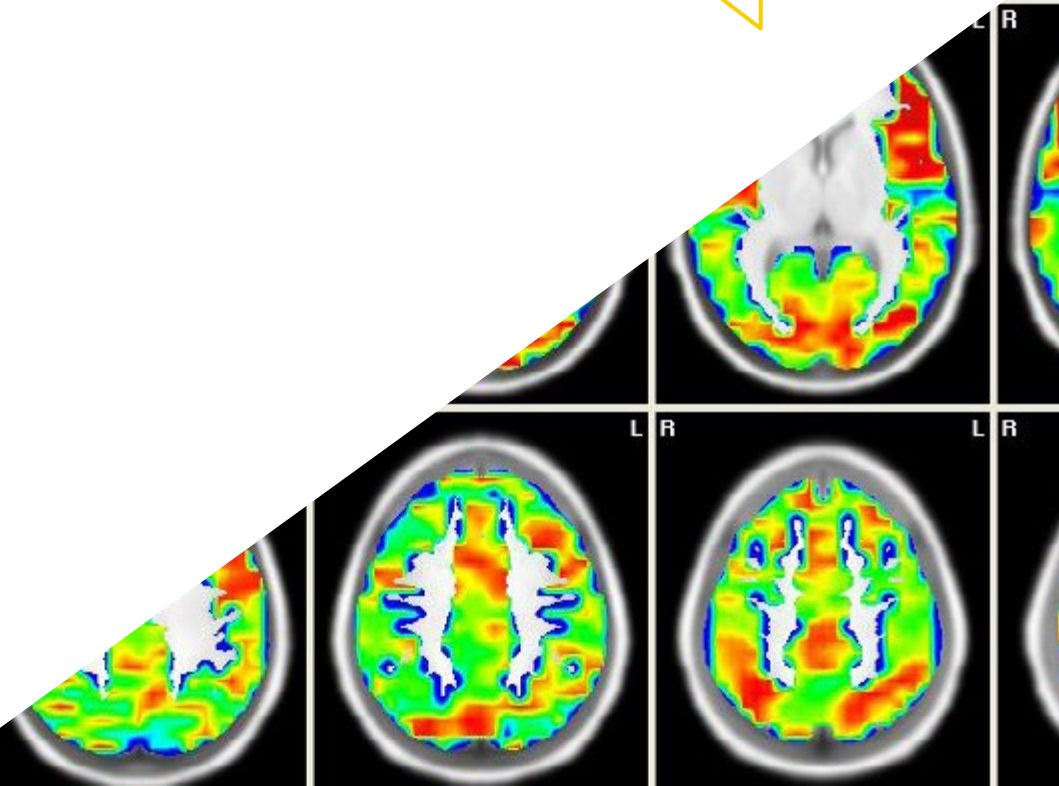
The teaching staff includes professionals from the field of Neuroanatomy and Neurophysiology for Physiotherapy, who bring their experience to this program, as well as renowned specialists belonging to leading societies and prestigious universities.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby students must try to solve the different professional practice situations that arise throughout the program. To that end, they will be assisted by an innovative, interactive video system developed by renowned and extensively experienced experts in Neuroanatomy and Neurophysiology for Physiotherapy.

Increase your decision-making confidence by updating your knowledge with this Postgraduate Certificate.

Seize the opportunity to learn about the latest advances in Neuroanatomy and Neurophysiology for Physiotherapy to improve patient care.



02 Objectives

The Postgraduate Certificate in the Neuroanatomy and Neurophysiology for Physiotherapy is oriented to facilitate the practice of the physiotherapist in their daily work related to neuroanatomy and neurophysiology.





“

This Postgraduate Certificate is designed to help you update your knowledge of Neuroanatomy and Neurophysiology for Physiotherapy with the use of the latest educational technology to contribute quality and confidence to your decision-making”



General objectives

- Learn to locate the different anatomical structures of the region
- Identify pathologies to ensure correct ultrasound-guided physiotherapy treatment
- Define the limits of ultrasound
- Learn about the use of ultrasound in the framework of physiotherapist skills



At TECH we are committed to your future and for that reason we make the effort to bring you the most complete program on the market"





Specific objectives

- Describe the structural anatomical bases of the nervous system
- Describe the functional anatomical bases of the nervous system
- Revise the different theories of motor control
- Gain up-to-date knowledge in the neuroscience applied to neurological injuries



03

Course Management

The program includes in its teaching staff renowned experts in Neuroanatomy and Neurophysiology for Physiotherapy, who contribute their work experience to this course. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner.





“

*Learn the latest advances in procedures in
Neuroanatomy and Neurophysiology for
Physiotherapy from leading professionals”*

Management



Ms. De Andrés Garrido, Berta

- ♦ Neurophysiotherapist at the Neurological Rehabilitation Center in Neurointegra
- ♦ Diploma in Physiotherapy
- ♦ Master's Degree in Neurological Physiotherapy of Adults and Children
- ♦ Master's Degree in Neurological Physiotherapy

Professors

Mr. Ruiz García, Pablo

- ♦ Physiotherapist in ADACEA Alicante
- ♦ Degree in Physiotherapy
- ♦ Master's Degree in Neurorehabilitation

Mr. Sarrias Arrabal, Esteban

- ♦ Department of Psychology at the University of Seville

Dr. Rodríguez Sánchez, Augusto Rembrandt

- ♦ Professor en Cardenal Spínola University Center of Studies CEU
- ♦ Degree in Physical Activity and Sports Science
- ♦ PhD from the University of Seville

Ms. Aguado Caro, Patricia

- ♦ Carries out her work at the Neurological Rehabilitation Center at Neurointegra
- ♦ Neuropsychologist

Ms. Narbona González, Natividad

- ♦ Carries out her work at the Neurological Rehabilitation Center at Neurointegra
- ♦ Neuropsychologist



04

Structure and Content

The content has been designed and structured by a team of professionals from the best educational centers, universities, and companies, who are aware of the relevance of current specialization to intervene in the education and support of students, and who are committed to quality teaching through new educational technologies.





“

This Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy contains the most complete and up-to-date scientific program on the market”

Module 1. Neuroanatomy and Neurophysiology

- 1.1. Introduction to Structural Neuroanatomy
- 1.2. Introduction to Functional Neuroanatomy
- 1.3. Spinal Cord
- 1.4. Brainstem
- 1.5. Frontal
- 1.6. Parietal
- 1.7. Temporal
- 1.8. Occipital
- 1.9. Cerebellum
- 1.10. Basal Ganglia
- 1.11. Neuroplasticity
- 1.12. Motor Behavior
- 1.13. Motor Control





“

A unique, key, and decisive educational experience to boost your professional development”

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.





“

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 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

This Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy guarantees you, in addition to the most rigorous and up-to-date training, 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 program will allow you to obtain your **Postgraduate Certificate in Neuroanatomy and Neurophysiology for Physiotherapy** 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 Neuroanatomy and Neurophysiology for Physiotherapy**

Modality: **online**

Duration: **6 weeks**

Accreditation: **8 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.

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



Postgraduate Certificate

Neuroanatomy
and Neurophysiology
for Physiotherapy

- › Modality: online
- › Duration: 6 weeks
- › Certificate: TECH Global University
- › Credits: 8 ECTS
- › Schedule: at your own pace
- › Exams: online

Postgraduate Certificate

Neuroanatomy and Neurophysiology for Physiotherapy

Endorsed by the NBA

