

# Postgraduate Certificate

## Neurobiological Principles of Psychotherapy



## Postgraduate Certificate Neurobiological Principles of Psychotherapy

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

Website: [www.techtute.com/us/psychology/postgraduate-certificate/neurobiological-principles-psychotherapy](http://www.techtute.com/us/psychology/postgraduate-certificate/neurobiological-principles-psychotherapy)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Structure and Content

---

*p. 12*

04

Methodology

---

*p. 16*

05

Certificate

---

*p. 24*

# 01

# Introduction

Time-limited psychotherapy (LTP) has attracted increasing interest in its neurobiological basis. Recent research has explored how brief, focused interventions can induce lasting neurobiological changes, especially in brain areas related to emotional regulation and decision-making. Neuroimaging studies, for example, have shown modifications in prefrontal cortex and amygdala activity, suggesting that PTL can improve the brain's ability to manage stress and negative emotions. In this situation, TECH has launched a comprehensive online and flexible program, which requires only an electronic device with Internet access to use the teaching materials. In addition, it is based on the revolutionary Relearning learning methodology.





“

*With this 100% online Postgraduate Certificate, you will address how neurobiological processes influence Time Limited Psychotherapy, understanding the brain changes that occur during treatment”*

The Neurobiological Basis of Time Limited Psychotherapy (LTP) is receiving increasing attention in the scientific and clinical community. From a PTL perspective, this approach seeks to optimize therapeutic resources within a defined time frame, taking advantage of neurobiological mechanisms to promote changes in the psychological well-being of individuals.

In this way, this Postgraduate Certificate is born, which will delve into the understanding of how patients' experiences and perceptions are processed and stored in the brain, which redefines contemporary therapeutic practice. In this way, the fundamental notion that therapeutic intervention is more focused in the realm of the virtual will be introduced, i.e., on the patient's mental representations and reconstructions, rather than on objectively occurring events.

Likewise, the study plan will focus on the patient's processing of reality, based on the premise that "it is not what happens, but what patients do with what happens" that determines their mental and emotional state. In this sense, it will explore how patients interpret and give meaning to their experiences, influencing their psychological well-being. From this perspective, psychologists will master techniques to help them reinterpret and reconfigure their internal narratives.

Finally, the brain chemistry involved in emotional and cognitive processes will be addressed, detailing the main chemical families, such as neurotransmitters and hormones, and the interactions between them. How imbalances or peculiarities in these chemical interactions can affect the patient's behavior and emotions will also be discussed.

Therefore, TECH has introduced a fully online and adaptable program, designed to meet the needs of students, which eliminates the obligation to travel to a physical center or adjust to a pre-established schedule. In addition, it integrates the innovative Relearning methodology, focused on the repetition of essential concepts to improve the understanding of the contents.

This **Postgraduate Certificate in Neurobiological Principles of Psychotherapy** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Neurobiological Principles of Psychotherapy
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out 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



*You will master more effective techniques tailored to individual patient needs, improving therapeutic outcomes in shorter periods of time, through an extensive library of multimedia resources”*

“

*You will equip yourself with advanced knowledge of how neurobiological aspects influence the practice of Time Limited Psychotherapy, enhancing your effectiveness in brief, targeted interventions”*

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

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will inquire into how patients experience and internalize their world, offering tools to modify perceptions and emotional responses that may be misaligned with their current reality.*

*The patient's own cognitive and emotional restructuring will be presented as a central axis for the success of your Limited Time Psychotherapy treatment. With all TECH's quality guarantees!*



# 02

# Objectives

The main objective of the Postgraduate Certificate will be to equip professionals with an in-depth understanding of how underlying neurobiological interactions influence behavior and the human psyche in the context of Time Limited Psychotherapy (LTP). Therefore, techniques and methodologies that enable therapists to understand and manage the mental and emotional processes of their patients, viewing events as subjective perceptions rather than objective facts, will be explored. By unraveling the complex relationship between brain structure, neurochemical functions and emotional responses, psychologists will design more effective, efficient and personalized interventions.





“

*Bet on TECH! You will develop neuroscience-informed assessment and diagnostic skills, promoting the integration of biological approaches with psychological and social models in your daily clinical practice”*

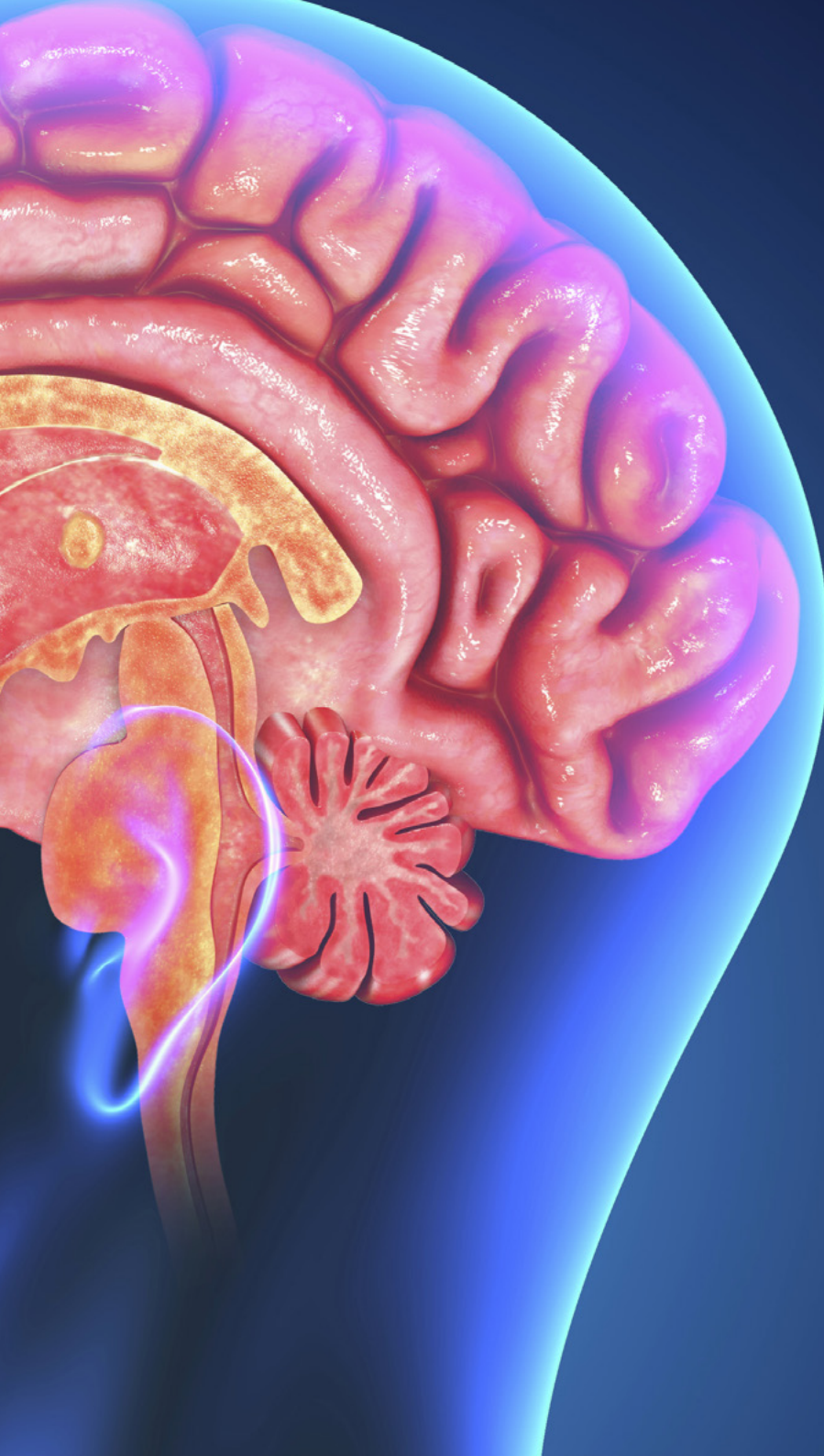


## General Objectives

---

- ♦ Describe and develop intervention models for Time Limited Psychotherapy
- ♦ Master the neurological and biochemical laws that show how, with other models, patients do not change their emotional response despite intervention
- ♦ Describe the arsenal of technology that allows patients to change their traumatic memories into memories of remembrance
- ♦ Explain the bonding relationship that is established between the patient and the therapist (reciprocal interaction)





## Specific Objectives

---

- Know that the territory of intervention is more in the virtual realm than in what happens
- Discover that what is important is not what happens but what the patient does with what happens
- Know that the reality for patients is what they record in their brain, and not so much what could have happened
- Identify the chemical families and interactions between them

“

*You will apply an integrated approach that combines neurobiological theory with clinical practice in improving the well-being of patients, through the best didactic materials, at the forefront of technology and education”*

# 03

## Structure and Content

The core topics of the academic program will include a detailed exploration of how brain structures and functions influence cognition and behavior, as well as the study of neuroplasticity and how it can be fostered through therapeutic interventions. It will also focus on understanding the neural basis of emotions and how they affect human mental health and behavior. In addition, techniques for identifying and modifying neural patterns that contribute to psychological disorders will be covered, using time-limited approaches essential for effective and efficient interventions.





“

*Take advantage of this unique TECH opportunity! You will delve into the interactions between different chemical families in the brain, gaining the tools to understand and manipulate these processes in a clinical context”*

**Module 1. Scientific and Neurobiological Basis of PTL**

- 1.1. Globalizing Model of Brain Functioning
- 1.2. Hemispheric Specialization
- 1.3. Hemispheric Lateralization in Hypnosis
- 1.4. More Cerebral Verticality than Horizontality
- 1.5. Rivers of Chemistry
- 1.6. Chemical Families and Interactions Between Them
- 1.7. Theory of the Etiology of Mental Health and Mental Illness
- 1.8. Health Model: Conscious Emotional Bonding
- 1.9. Illness Model: Time-Limited Psychotherapy





“

*This comprehensive approach will ensure that you can apply advanced knowledge of neurobiology to your Time Limited Psychotherapy practice, improving the quality and accuracy of care. What are you waiting for to enroll?"*

04

# 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. Specialists learn better, faster, and more sustainably over time.

*With TECH the psychologist experiences 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 in the psychologist's professional 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. Psychologists who follow this method not only master the assimilation of concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
2. Learning is solidly translated into practical skills that allow the psychologist to better integrate knowledge into clinical practice.
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.

Our 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, which is a real revolution compared to the simple study and analysis of cases.

*The psychologist 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).

This methodology has trained more than 150,000 psychologists with unprecedented success in all clinical specialties. 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 highly 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.



#### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current psychology. 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 the videos as many times as you like.



#### 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 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 suggesting that observing third-party experts can be useful.  
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.



05

# Certificate

The Postgraduate Certificate in Neurobiological Principles of Psychotherapy guarantees students, 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 **Postgraduate Certificate in Neurobiological Principles of Psychotherapy** 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 Neurobiological Principles of Psychotherapy**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





## Postgraduate Certificate Neurobiological Principles of Psychotherapy

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

# Postgraduate Certificate

## Neurobiological Principles of Psychotherapy

