

# Postgraduate Certificate Pharmacology of Pain



## Postgraduate Certificate Pharmacology of Pain

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

Website: [www.techtitute.com/us/psychology/postgraduate-certificate/pharmacology-pain](http://www.techtitute.com/us/psychology/postgraduate-certificate/pharmacology-pain)

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# 01

# Introduction

Medicines are drugs that are used for therapeutic purposes, alone or in combination, representing a specialty. The action of drugs in the body, as well as their origin, synthesis, preparation, properties, actions from the molecular level to the level of the whole organism, their way of positioning and moving in the body, forms of administration, therapeutic indications, toxic actions, all form Pharmacology knowledge. It becomes, therefore, a multidisciplinary field that admits professionals from molecular biologists to psychotherapists.



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*This Postgraduate Certificate will help you develop all the current expertise in pharmacological science along with the whole universe of knowledge you will need”*

21st century psychologists must be familiar with all the tools aimed at the biopsychosocial health of patients suffering from psychological disorders. Pharmaceuticals are one of these tools, and for this reason, psychologists must have a thorough knowledge of how they work in order to be able to adhere to their specialty, such as psychotherapy or group intervention.

Pharmacology studies the properties and actions that medication produces in organisms, making it a biological science. Any chemical substance that interacts in the living organism is called a pharmaceutical drug. In a more restricted sense, and as it will be considered in this Postgraduate Certificate, a drug is any chemical substance used to prevent the appearance of an undesirable physiological process, or in the treatment, cure, prevention or diagnosis of a disease.

In the context of Psychologists' qualifications in Pharmacology, this program offers a unique opportunity to achieve the highest level of expertise in clinical practice with medicated patients. Pharmacology offers the possibility of knowing pharmacological drug actions and properties in such a way that they can be prescribed and applied to patients with rigor, with maximum safety, and in optimal conditions. The levels of knowledge may vary depending on the skills and requirements of each person and each profession related to pharmacological therapeutics.

Undoubtedly, the primary objective of Pharmacology is to benefit the patient, and to do so as rationally and strictly as it is usually done to reach the correct diagnosis. Psychologists can help with their expertise in the diagnosis and prescription of the most appropriate medication for each patient. In the last forty years, the development of chemistry, physiology and biochemistry, and analytical technology has made it possible to isolate highly active products from natural sources and, above all, design and synthesize new compounds, analyze their actions and effects at all possible levels of organization of the living substance, and learn about the processes that follow their passage through the organism. This has led to an explosion in the production of therapeutically active pharmaceutical products, an accumulation of information that is not always easy to assimilate, and, above all, the possibility of rigorous, objective and individualized application to the characteristics of each patient.

This **Postgraduate Certificate in Pharmacology of Pain** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ Clinical cases presented by experts in the different specialties
- ♦ 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 diagnostic and therapeutic techniques in Medical History and Evaluation of Medicated Patients
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ With special emphasis on evidence-based psychology and research methodologies in Psychology
- ♦ All of this will be complemented by 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 through this Postgraduate Certificate in Pharmacology of Pain in a practical way adapted to your needs"*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Pharmacology of Pain, you will obtain a qualification endorsed by TECH Technological University"*

It includes in its teaching staff health professionals belonging to the field knowledge of Pharmacology of Pain, who pour their work experience into this program, in addition to recognized specialists belonging to leading scientific societies.

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

The design of this program is based on Problem-Based Learning, through which the physician must try to solve the different professional practice situations that arise throughout the academic course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Pharmacology of Pain with extensive teaching experience.

*Study this program under an intensive but flexible academic program, without established schedules or having to travel to on-site centers, but with the ease of accessing the content whenever you need it from any device with internet access.*

*Get to know the particularities of Pharmacology of Pain and successfully apply this learning in your daily practice.*



02

# Objectives

This program's primary objective is focused on theoretical and practical learning, so psychologists are able to master Pharmacology of Pain in both a practical and rigorous way.







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*This up-to-date program will provide you with a sense of confidence in the practice of psychology, which will help you grow both personally and professionally”*



## General Objectives

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- ♦ Identify the absorption properties of medication
- ♦ Develop proficiency in pharmacodynamics
- ♦ Identify the evolution of the different disorders listed in the DSM-5 or ICD-10
- ♦ Master the field of medical-psychologist interaction in family intervention
- ♦ Train the professional on all the updated references on the diagnosis, intervention and therapeutic process in order to interact with the medication
- ♦ Describe with decision protocols the individualized study of family members to perform a rigorous psychopathological study
- ♦ Organize all the information within a multidisciplinary framing model in the study of the biopsychosocial framework of the psychotherapy-pharmacology relationship



*Make the most of this opportunity and take the leap to get up to date on the latest developments in Pharmacology of Pain"*





## Specific Objectives

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- ♦ Design and conduct controlled clinical studies on pain
- ♦ Master pain within the framework of therapy
- ♦ Manage acute pain with psychopharmaceuticals
- ♦ Master the assessment and intervention tools using all the pain intervention indicators
- ♦ Develop follow-up models that express the changes of pathologies specific to mental states and pain
- ♦ Identify and master the clinical and prognostic features of the different disorders of childhood and adolescence with pharmacological intervention on pain

03

# Course Management

This program includes highly regarded health professionals in the field of psychology in its teaching staff, who bring their work experience to this course.

In addition, renowned specialists, members of prestigious national and international scientific communities, are involved in designing and preparing the program.





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*Learn the latest advances  
in Pharmacology of Pain in  
leading professionals"*

## Management



### Dr. Aguado Romo, Roberto

- ♦ Psychologist specializing in Clinical Psychology
- ♦ European specialist in Psychotherapy from the EFPA
- ♦ President of the European Institute of Time-Limited Psychotherapy
- ♦ Director of the Evaluation and Psychotherapy Center of Talavera, Bilbao and Madrid
- ♦ Director of the scientific journal Psinapsis
- ♦ Master's Degree in Clinical and Health Psychology from the Spanish Society of Psychosomatic Medicine and Health Psychology
- ♦ Tutor of the Basic Psychology course at the UNED

## Professors

### Dr. De Dios González, Antonio

- ♦ Director the Psychology Department of the Hospital Quirón de Marbella, Spain
- ♦ Director of Avatar Psychologists
- ♦ Master's degree in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies
- ♦ Transpersonal Therapist by the Spanish School of Transpersonal Development
- ♦ Master's Degree in Neuro-Linguistic Programming (N.L.P.) by Richard Bandler's Society of Neuro-Linguistic Programming
- ♦ Specialist in Clinical Hypnosis and Relaxation

### Dr. González, Mónica

- ♦ Psychologist in charge of the Department of Child and Adolescent Psychology at Hospital Quirón Salud Marbella and Avatar Psicólogos
- ♦ Master's Degree in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapy
- ♦ University Specialist in Clinical Hypnosis with Selective Dissociation Focusing by the University of Almeria
- ♦ Collaborator in different Red Cross programs
- ♦ Professor in the Master's Degree in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapy
- ♦ Trainer of Avatar Psicólogos in different programs of emotional management for educational centers and companies. Trainer at Human Resources Consulting Services (HRCS)

### Dr. Martínez-Lorca, Manuela

- ♦ Doctorate in Psychology from the University of Castilla-La Mancha
- ♦ Health Psychologist
- ♦ Lecturer at the Department of Psychology at the UCLM
- ♦ Master's Degree in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies
- ♦ Specialist in Clinical Hypnosis and Relaxation

### Dr. Roldán, Lucía

- ♦ Health Psychologist
- ♦ Cognitive-behavioral intervention specialist
- ♦ Master in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies
- ♦ Expert in energy therapy intervention

04

# Structure and Content

The structure of the contents has been designed by a team of professionals who recognize the implications of the program in the daily praxis of Psychology in depression, eating and sleep disorders, aware of the relevance of the current program to treat the patient with mood disorders committed to quality teaching using new educational technologies.





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*This Postgraduate Certificate in Pharmacology of Pain contains the most complete and up-to-date scientific program on the market”*

## Module 1. Technologies Used in the Pain Unit

- 1.1. Medical History the Patient in Pain
- 1.2. Psychosocial Approach to Chronic Pain
- 1.3. Patient-Controlled Analgesia (PCA)
- 1.4. Pain in Polytrauma Patients
- 1.5. Pain in Severe Burns
- 1.6. Headaches and Facial Pain
- 1.7. Treatment of Neuralgia
- 1.8. Treatment of Oncological Pain
- 1.9. Pain and Terminal Sedation
- 1.10. Fibromyalgia



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*A unique, key, and decisive  
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.



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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. 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.

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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. 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.



06

# Certificate

This Postgraduate Certificate in Pharmacology of Pain 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 Pharmacology of Pain** contains the most complete and up-to-date 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 Pharmacology of Pain**

Official N° of Hours: **200 h.**



\*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 quality

online training

development languages

virtual classroom

**tech** technological  
university

Postgraduate Certificate

Pharmacology of Pain

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

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