



## Postgraduate Certificate

Fundamental Pharmacology

» Modality: online

» Duration: 8 weeks

» Certificate: TECH Global University

» Credits: 8 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/fundamental-pharmacology

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## tech 06 | Introduction

Fundamental Pharmacology is a complex area that requires a high qualification by physicians to know in depth each of the drugs they have at their disposal to improve the symptoms of different diseases. In this way, the action of the drug in the organism is studied, as well as its origin, synthesis, preparation, properties, actions from the molecular level to the level of the whole organism, its way of positioning and moving, and the forms of administration, among others.

This Postgraduate Certificate offers the possibility of knowing the actions and properties of medicines, so that they can be prescribed and applied to patients with rigor, maximum safety and in optimal conditions. In order to improve the student's skills, TECH presents this very complete qualification that includes the most complete and relevant information on the different medications that should be administered in each case, taking into account the possible contraindications that they may entail for the patient.

Also, as it is a totally online course, the graduate is not conditioned by fixed schedules or the need to move to another physical location, but can access rich content that will help you reach the elite of emotion-based psychotherapy at any time of the day, combining, at your own pace, your work and personal life with the academic.

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

- Practical cases presented by experts in Pharmacology
- 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



Advance professionally thanks to this Postgraduate Certificate by means of its innovative content and prestigious teaching staff"



This program is an excellent opportunity to take a practical internship that will help you develop effective analysis plans for differential diagnosis"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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 training programmed to train 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Learn from the best and take your skills to the next level by training in multidisciplinary patient history management.

> You will have deep and up-to-date knowledge on the different drugs, which will be of great help for patients to resume their normal life.







## tech 10 | Objectives



#### **General Objectives**

- Master the current knowledge on medication used in psychiatry and neurology
- Train to achieve the therapist-patient-medication link
- Identify the absorption properties of medication
- Develop proficiency in pharmacodynamics
- Describe in protocols the intervention programs, taking into account the characteristics and specific aspects of taking medication
- Identify the evolution of the different disorders listed in the DSM-5 or ICD-10
- Master the fields of physician-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
- Use decision trees to make a permanent differential diagnosis
- Organize all the information within a multidisciplinary framing model in the study of the biopsychosocial framework of the psychotherapy-pharmacology relationship







## **Specific Objectives**

- Describe the patient's clinical history
- Discover and promote the family psychic fabric
- Differentiate the different etiologies of mental disorders
- Manage and master the role of sympathy and empathy in vicarious learning
- Show the importance of admiration in the overall balance of the family
- Develop effective analysis plans for differential diagnosis
- Identify psychopharmacological needs in mood disorders
- Manage the patient's medical history, as well as provide the necessary skills to work in a multidisciplinary manner



Thanks to this Postgraduate Certificate, you will be able to learn about the latest advances in Fundamental Pharmacology applied in the best clinics"





## tech 14 | Course Management

#### Management



#### Mr. Aguado Romo, Roberto

- Psychologist specializing in Clinical Psychology
- European specialist in Psychotherapy from the EFPA
- President of the European Institute of Time-Limited Psychotherapy
- Author with patents in psychotherapy models and techniques
- Psychologist Specialist in Clinical Psychology, founder and director of the CEP of Madrid, Bilbao and Talavera de la Reina
- Tutor of the Basic Psychology course at the UNED
- Director of the scientific journal Psinapsis
- Master's Degree in Clinical and Health Psychology by the Spanish Society of Psychosomatic Medicine and Health Psychology

#### **Professors**

#### Dr. De Dios González, Antonio

- Director of Avatar Psychologists
- Director of the Psychology Department of Hospital Quirón de Marbella
- Master in Time-Limited Psychotherapy and Health Psychology by the European Institute of Time-Limited Psychotherapies
- Transpersonal Therapist by the Spanish School of Transpersonal Development
- EFT Specialist by the World Center for EFT
- Master in Neuro-Linguistic Programming (NLP) by Richard Bandler's Society of Neuro-Linguistic Programming. Specialist in Clinical Hypnosis and Relaxation

#### Dr. González Agüero, Mónica

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

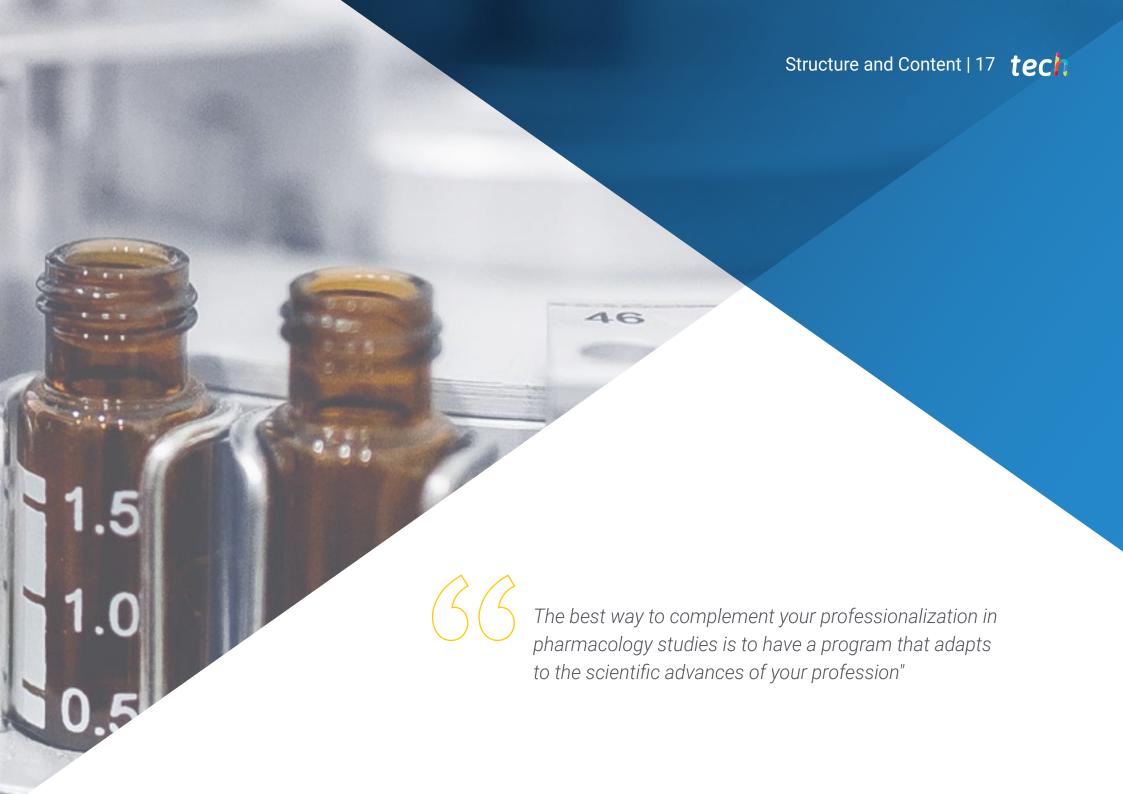
#### Dr. Martínez Lorca, Manuela

- Doctorate in Psychology from the University of Castilla-La Mancha
- Health Psychologist
- Lecturer in the Department of Psychology at the University of Castilla La Mancha UCLM
- Master's Degree in Time-Limited Psychotherapy and Health Psychology from the European Institute
- of Time-Limited Psychotherapies (I.E.P.T.L.)
- 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





## tech 18 | Structure and Content

## **Module 1.** Pharmacology and Its Objectives in the Psychological Therapeutic Process

- 1.1. Anthropological, Historical, Sociological and Psychological Perspective of the Use of Drugs
- 1.2. Objectives of Pharmacology
- 1.3. Concept of Pharmacology
- 1.4. Therapeutic Pharmacology
- 1.5. Pharmacodynamics
- 1.6. Pharmacokinetics
- 1.7. Plasma Level Curve
- 1.8. Toxicology
- 1.9. Social Aspects of the Drug
- 1.10. Medication Intervention Process
- 1.11. Information form for the Patient Who Is Going to Receive Psychopharmacological Treatment
- 1.12. Signs and Symptoms. Diseases and Syndromes







You won't find another program like this one to update you and, later, put into practice your newly acquired skills in Fundamental Pharmacology"





## tech 22 | Methodology

#### 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 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 in the physician'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:

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.





#### 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.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





## Methodology | 25 tech

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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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 TECH's learning system is 8.01, according to the highest international standards.

## tech 26 | Methodology

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.



#### **Surgical Techniques and Procedures on Video**

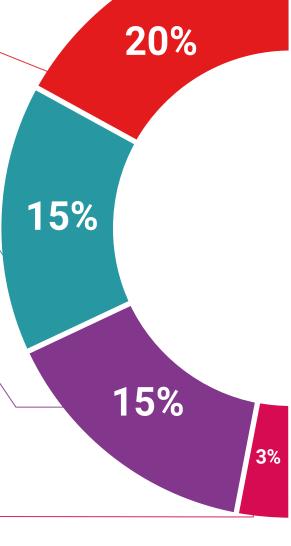
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many 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 on the usefulness of learning by observing experts.

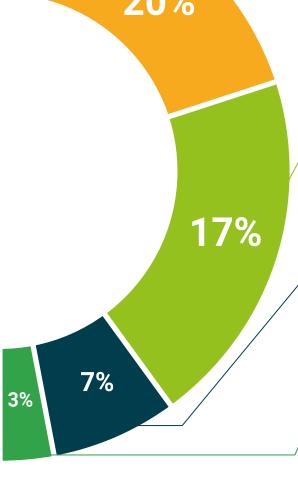
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Fundamental Pharmacology** 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 Fundamental Pharmacology

Modality: online

Duration: 8 weeks

Accreditation: 8 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Fundamental Pharmacology

This is a program of 240 hours of duration equivalent to 8 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

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