

# Postgraduate Certificate

## Diagnosis and Treatment of Parasitic and Tropical Diseases





## Postgraduate Certificate Diagnosis and Treatment of Parasitic and Tropical Diseases

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

Website: [www.techtute.com/pk/pharmacy/postgraduate-certificate/diagnosis-treatment-parasitic-tropical-diseases](http://www.techtute.com/pk/pharmacy/postgraduate-certificate/diagnosis-treatment-parasitic-tropical-diseases)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Structure and Content

---

*p. 12*

04

Methodology

---

*p. 16*

05

Certificate

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*p. 24*

# 01

# Introduction

This TECH program was created with the objective of specializing pharmacists in everything related to the diagnosis and treatment of parasitic and tropical diseases, through this highly scientifically rigorous program. You will learn the latest techniques and developments in the field, from professionals with years of experience in the sector. A unique opportunity to specialise in a high demand professional field.



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*With this Postgraduate Certificate, you have the opportunity to update your knowledge in a comfortable way and without renouncing to the highest scientific standards, to incorporate the latest advances in the approach to infectious pathology in your daily practice"*

Infectious diseases remain the leading cause of mortality and disability (loss of productive life years) in the world. In 2016, of the total 56.4 million deaths worldwide, 33% were due to infectious diseases, 30% to cardiovascular diseases and 10% to cancer. The fight against disease will have two simultaneous fronts: infectious diseases and chronic non-communicable diseases.

Among the 17.3 million people who died from infections in 2016, the most frequent causes of death were lower respiratory infections (3.7 million), malaria (2.2 million), tuberculosis (1.3 million), diarrhea (1.4 million), and HIV/AIDS infection (1.1 million). The most important factors to take into consideration in relation to infectious diseases are demographics and human behavior, technological and industrial development, economic development and variations in land use, intercontinental travelling and commerce, climate change, microbionic adaptation and finally the disappearance or reduction of efficient public health measures.

These factors, interacting with each other, have conditioned that we should not consider any part of the planet reasonably isolated from the rest, nor impossible the appearance, reappearance or dissemination of imported or apparently eradicated infectious diseases in our environment.

This Postgraduate Certificate approaches this problem from a practical perspective, focusing on parasitic and tropical diseases and their most effective means of approach and treatment.

This **Postgraduate Certificate in Diagnosis and Treatment of Parasitic and Tropical Diseases** contains the most complete and up to date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts in Diagnosis and Treatment of Parasitic and Tropical Diseases
- ♦ 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
- ♦ New developments on Diagnosis and Treatment of Parasitic and Tropical Diseases
- ♦ Practical exercises where self assessment can be used to improve learning
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ 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



*Seize the moment and gain up to date knowledge on the management of coronavirus infections"*



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*This Postgraduate Certificate is the best investment you can make in a qualification for two reasons: you will obtain a Postgraduate Certificate from the largest digital university in Spain, TECH, and you will acquire the best and most up to date education in Diagnosis and Treatment of Parasitic and Tropical Diseases"*

Its faculty is made up of prestigious and renowned professionals, with a long history in health care, teaching and research, who have worked in many countries on several continents, developing a professional and teaching experience that they deliver in an extraordinary way in this program.

The methodological design of this program, developed by a multidisciplinary team of e-learning experts, integrates the latest advances in educational technology for the creation of numerous multimedia educational tools that allow the professional, based primarily on the problem-solving method, to face the solution of real problems in their daily clinical practice, which will allow them to progress in the acquisition of knowledge and the development of skills that will impact their future professional work.

It should be noted in this program that all of the contents generated, as well as the videos, self evaluations, clinical cases and exams have been thoroughly reviewed, updated, and integrated by the teachers and the team of experts that make up the working group, to facilitate the learning process with a step-by-step approach in order to achieve the teaching program objectives.

*This program, recently updated due to the global pandemic situation, is the best in the educational landscape for tropical infections.*

*Do not miss the opportunity to learn about the advances in the treatment of infections to incorporate them into your daily pharmaceutical practice.*



02

# Objectives

The fundamental purpose of the educational program is to specialize and improve the pharmacist to achieve a deep theoretical mastery of the latest and most current scientific knowledge in the area of clinical infectious diseases, as well as the development of skills that allow them to approach the complex process of health and infectious diseases in individuals and communities more comfortably and safely in practice.





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*This program will generate a sense of confidence in the performance of pharmacy practice, which will help you grow personally and professionally"*



## General Objectives

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- Update or deepen your knowledge and develop your skills for daily clinical practice in healthcare, teaching or research roles in the field of infectious diseases in order to provide individual or group population care that allows for the improvement of health indicators.
- Improve the pharmaceutical and health care of patients with infectious diseases, based on comprehensive care, the application of the clinical epidemiological method and the correct use of antimicrobials in accordance with the most up to date scientific evidence.





## Specific Objectives

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- ◆ Delve deeper into the study of the most important parasitic diseases
- ◆ Highlight the importance of morbidity and mortality due to infections in international travelers

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*Improve your daily practice as a pharmacist by taking advantage of the specialization offered with this Postgraduate Certificate in Diagnosis and Treatment of Parasitic and Tropical Diseases”*



03

# Structure and Content

The teaching program has been created by a group of professors and medical professionals from various medical specialties, with extensive research and teaching experience in several countries in Africa, Central and South America, interested in integrating the latest and most up to date scientific knowledge of clinical infectious diseases and antimicrobial therapeutics, to ensure specialization and professional development to improve the daily clinical practice of professionals who care for patients or populations with infectious diseases.





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*This Postgraduate Certificate in Diagnosis and Treatment of Parasitic and Tropical Diseases contains the most complete and up to date scientific program on the market”*

## Module 1. Parasitic and Tropical Diseases

- 1.1. Introduction to Parasitology
  - 1.1.1. General Concepts Used in Parasitology
  - 1.1.2. Epidemiology of the Main Parasitosis and Tropical Diseases
  - 1.1.3. Classification of Parasites
  - 1.1.4. Tropical Diseases and Fever Syndrome in the Tropics
- 1.2. Malaria
  - 1.2.1. Epidemiology
  - 1.2.2. Etiological Agent
  - 1.2.3. Pathogenesis
  - 1.2.4. Clinical Picture
  - 1.2.5. Complications
  - 1.2.6. Diagnosis
  - 1.2.7. Treatment
- 1.3. Diseases from Intestinal Protozoas
  - 1.3.1. Main Intestinal Protozoa
  - 1.3.2. Diagnosis of Intestinal Protozoa
  - 1.3.3. Amebiosis and Giardiasis
- 1.4. Filarial Diseases
  - 1.4.1. Epidemiology and the Worldwide Situation
  - 1.4.2. Clinical Syndromes
  - 1.4.3. Main Filarial Diseases: Wuchereria Bancrofti, Brugia malayi, Brugia timori, Onchocerca volvulus, Loa loa, Mansonella Perstans, Mansonella Streptocerca y Mansonella Ozzardi
- 1.5. Leishmaniasis
  - 1.5.1. Cutaneous Leishmaniasis
  - 1.5.2. Deep Leishmaniasis
- 1.6. Trypanosomiasis
  - 1.6.1. African Trypanosomiasis
  - 1.6.2. American Trypanosomiasis:





- 1.7. Schistosomiasis
  - 1.7.1. Haematobium Schistosomiasis
  - 1.7.2. Schistosomiasis Mansoni
  - 1.7.3. Schistosomiasis Japonicum
  - 1.7.4. Schistosomiasis Intercalatum
- 1.8. Intestinal Parasitism
  - 1.8.1. Epidemiology
  - 1.8.2. Ascariidiosis
  - 1.8.3. Oxiuriasis
  - 1.8.4. Hookworm and Necatoriasis
  - 1.8.5. Trichuriasis
- 1.9. Tapeworm Infections
  - 1.9.1. Intestinal Tapeworms
  - 1.9.2. Tissue Tapeworms
- 1.10. Antiparasitics II
  - 1.10.1. General Concepts
  - 1.10.2. Main Definitions Used in the Management of Antiparasitics
  - 1.10.3. Classifications Used by Chemical Structure, Mechanism of Action, or Antiparasitic Action
  - 1.10.4. Mechanisms of Action
- 1.11. Antiprotozoals
  - 1.11.1. Classification
  - 1.11.2. Mechanisms of Action
  - 1.11.3. Antiparasitic Spectrum
  - 1.11.4. Pharmacokinetics and Pharmacodynamics
  - 1.11.5. Dose and Presentation
- 1.12. Antiparasitic for Helminths
  - 1.12.1. Classification
  - 1.12.2. Mechanisms of Action
  - 1.12.3. Antiparasitic Spectrum
  - 1.12.4. Pharmacokinetics and Pharmacodynamics
  - 1.12.5. Dose and Presentation

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 be confronted with multiple simulated clinical cases based on real patients, in which they will have to investigate, establish hypotheses and ultimately, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Pharmacists learn better, more quickly 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. Gervas, 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, attempting to recreate the actual conditions in a pharmacist'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. Pharmacists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their 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.

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 represent a real revolution with respect to simply studying and analyzing cases.

*Pharmacists 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, more than 115,000 pharmacists have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. This pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years.

*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.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



### Video Techniques and Procedures

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current pharmaceutical care procedures. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better 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, we will present you with real case developments in which the expert will guide you through 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.



05

# Certificate

The Postgraduate Certificate in Diagnosis and Treatment of Parasitic and Tropical Diseases guarantees students, in addition to the most rigorous and up to date education, access to a qualification 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 Diagnosis and Treatment of Parasitic and Tropical Diseases** contains the most complete and up to date scientific program on the market.

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

The certificate 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 Diagnosis and Treatment of Parasitic and Tropical Diseases**

Official N° of hours: 150 h.



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



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