

# Postgraduate Certificate

## Low Vision and Geriatric Optometry



## Postgraduate Certificate Low Vision and Geriatric Optometry

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/low-vision-geriatric-optometry](http://www.techtute.com/us/medicine/postgraduate-certificate/low-vision-geriatric-optometry)

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# 01

# Introduction

Due to the increase in life expectancy and a greater evolution of retinal pathologies, which cause a greater number of people to have low vision, it is more necessary to identify these conditions, since prevention and prompt attention avoid many situations that are difficult to deal with when the damage becomes greater. It is therefore necessary for professionals to obtain the basic and specific concepts to intervene in these patients.



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*The latest advances in the area of Optical Technologies and Clinical Optometry compiled in a highly efficient Postgraduate Certificate that will optimize your effort with the best results”*

This Postgraduate Certificate in Low Vision and Geriatric Optometry covers the main fields of optometrist action, always highly updated and with a first level teaching staff. The syllabus has been designed from the perspective and experience of experts highly specialized in their module, and immersed in the clinical world.

This program will present the latest advances in the knowledge and examination of low vision, new classifications and treatments, as well as the initial approach to these patients and to the follow-up process. Everything will be available in a state-of-the-art Virtual Campus, which can be accessed from any device with an Internet connection.

In this way, the physician will be able to take the program at their preferred schedules, without having to comply with fixed schedules or travel to on-site centers. In addition, they will find different resources that will make their experience more immersive, as well as the *Relearning* methodology, based on learning by doing and by repetition.

This **Postgraduate Certificate in Low Vision and Geriatric Optometry** is the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- ◆ More than 100 clinical cases presented by experts in the different specialities
- ◆ 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 developments in Low Vision and Geriatric Optometry.
- ◆ The presentation of hands-on workshops on procedures, diagnostic and therapeutic techniques
- ◆ 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



*Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate”*

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*This Postgraduate Certificate is the best investment you can make in selecting a refresher program to update your knowledge of Low Vision and Geriatric Optometry”*

Its teaching staff includes professionals belonging to the field of nutrition, who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an 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 throughout the program. The professional will be assisted by an innovative, interactive video system created by renowned and experienced experts in Low Vision and Geriatric Optometry.

*All the necessary methodology for non-specialist medical professionals in the field of Clinical Optometry, in a specific and concrete Postgraduate Certificate.*

*We have the best educational material, an innovative methodology and a 100% online program, which will facilitate your study.*



# 02 Objectives

This Postgraduate Certificate is designed to effectively update the physician knowledge in order to provide quality care based on the latest scientific evidence that guarantees patient safety.





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*If you are looking for success in your profession, we can help you achieve it. We offer you the most complete training on Optical Technologies and Clinical Optometry”*



## General Objectives

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- ◆ Learn the most advanced techniques in the examination and treatment of low vision, updating new concepts, as well as techniques to apply directly in their professional clinical practice.



*Take the next step to get up-to-date on the latest developments in Low Vision and Geriatric Optometry”*





## Specific Objectives

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- ◆ In-depth knowledge of the types of conditions that cause mild, medium and severe visual impairment
- ◆ In-depth knowledge of the visual alterations that occur in the different types of pathologies and non-ocular conditions that affect the visual system
- ◆ Learn the visual examination protocol to be performed for the detection and follow-up of the patient with low vision Know the techniques of the TR applied to patients
- ◆ In-depth knowledge of the new protocols for examination, treatment and action in a multidisciplinary manner
- ◆ Expand professional projection, being able to evaluate, diagnose and treat patients with low vision, who are currently neglected to a great extent by optometrists, since it is still a "young" discipline, unknown to society and a great part of eye care professionals

03

# Course Management

The program's teaching staff includes leading experts in Optometry, who contribute their vast work experience to this program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.



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*Leading professionals in the field have come together to teach you the latest advances in Low Vision and Geriatric Optometry”*

## Management



### Dr. Calvache Anaya, José Antonio

- ♦ Optometrist at Clínica Baviera in Palma de Mallorca
- ♦ Teacher in courses on Biostatistics, Keratometry and Corneal Topography and Ocular Biometry
- ♦ Degree in Optics and Optometry from the University of Alicante
- ♦ Doctor in Optometry and Vision Sciences from the University of Valencia
- ♦ Master's Degree in Advanced Optometry and Vision Sciences from the University of Valencia
- ♦ Postgraduate Diploma in Statistics Applied to Health Sciences UNED
- ♦ Postgraduate Certificate in Optics and Optometry from the University of Alicante

## Professors

### Dr. Roca Fernández del Villar, Ricardo

- ♦ Optometrist in CASAÑA ROCA SL
- ♦ Specialist in Low Vision in the Ophthalmology Service of Quirón Málaga.
- ♦ Manager and Founder of Óptica
- ♦ Diploma in Technological and Instrumental Optics from the Complutense University of Madrid
- ♦ Diploma in Optics from the Complutense University of Madrid



# 04

# Structure and Content

The structure of the contents has been designed by a team of experts and specialists in low vision and geriatric optometry, experts in the latest medical advances. This has allowed them to put into the syllabus all their years of experience and most recent cases. All this will be supported by a conglomerate of audiovisual resources and practical exercises, so that the Optometrist can significantly improve their skills and can redirect them to the labor field.







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*This Postgraduate Certificate in Low Vision and Geriatric Optometry will help you keep up-to-date to provide comprehensive quality care to patients”*

## Module 1. Low Vision and Geriatric optometry

- 1.1. Low Vision, Definition and Current Classifications
  - 1.1.1. Definition, New Terms and Concepts
  - 1.1.2. What Is a Low Vision Test?
  - 1.1.3. Functional Vision
  - 1.1.4. New Concept of Fragile Vision
  - 1.1.5. Different Classifications, a Single Protocol?
  - 1.1.6. Statistics Related to Visual Impairment of all Types
  - 1.1.7. Concepts and Terminology
  - 1.1.8. Low Vision Statistics
  - 1.1.9. Low Vision Decalogue
- 1.2. Ocular Pathologies and Other Conditions Causing Low Vision
  - 1.2.1. Degenerative and Non-Degenerative Pathologies
  - 1.2.2. Classification of These Pathologies According to Their Condition
  - 1.2.3. Physiopathogenesis
  - 1.2.4. Risk Factors
  - 1.2.5. Current Evolution of These Pathologies. Epidemiology
  - 1.2.6. Adjustment Process to Visual Impairment
  - 1.2.7. Low Vision in Children and Infants
- 1.3. Anamnesis in Low Vision and Multidisciplinary Intervention
  - 1.3.1. Preliminary Considerations
  - 1.3.2. Guidelines for Interacting with Low Vision Individuals
  - 1.3.3. Role of the Patient's Family And/or Companions
  - 1.3.4. How to Transmit the Information
  - 1.3.5. Accompanying the Person With Low Vision
  - 1.3.6. Patient Selection, Success or Failure, Outcome Prognoses
- 1.4. Clinical Intervention Protocol for Low Vision Individuals or Who Suffer Moderate to Severe Visual Loss
  - 1.4.1. WHO Diagram
  - 1.4.2. Individuals Eligible for Low Vision Adaptive Aids and Visual Rehabilitation
  - 1.4.3. Improved Intervention for People with Low Vision, Fragile Vision, or Neurological Injuries
  - 1.4.4. Tips for Professionals to Help Patients and Family Members
  - 1.4.5. Interdisciplinary Referral Protocol
  - 1.4.6. Interaction With People With Visual Impairment
  - 1.4.7. Same Conditions, Different Solutions
- 1.5. Low Vision Consultation Material
  - 1.5.1. Attitude and Aptitude
  - 1.5.2. Material in Low Vision and Geriatrics
  - 1.5.3. Tests Required for Evaluation
  - 1.5.4. Which Commercial Products Are Useful?
  - 1.5.5. Organization of a Low Vision Consultation
  - 1.5.6. Patient and Family Support Reports
- 1.6. Low Vision and Geriatric Vision Patient Examination
  - 1.6.1. Core Values in Caring for Low Vision and Geriatric Patients
  - 1.6.2. Dunning-Kruger Effect in Professionals
  - 1.6.3. Refraction of the Patient With Low Vision
  - 1.6.4. Distant Vision
  - 1.6.5. Near Vision
  - 1.6.6. What Does the Patient Want?
- 1.7. Visual and Non-visual Aids in Visual Limitation, Low Vision and Geriatrics
  - 1.7.1. Optical Aids, Classification
  - 1.7.2. Non-Optical Aids Environment in Patients with Low Vision
  - 1.7.3. Electronic Aids, Classification and Utilities
  - 1.7.4. Latest Technologies and Artificial Intelligence for Low Vision
  - 1.7.5. How to Create Positive Circumstances



- 1.8. Light, Its Importance and Basic Concepts Needed for Low Vision
  - 1.8.1. Notions of Light Spectrum
  - 1.8.2. Basic Concepts
  - 1.8.3. Adaptation to Light and Darkness in Low Vision
  - 1.8.4. Glare, a Fundamental Factor in Low Vision and Geriatrics
  - 1.8.5. Variable of Objects Influencing Vision
  - 1.8.6. Selective Filters: Not Everything Goes
- 1.9. Training in Low Vision Patient Support, Accompaniment and Follow Up
  - 1.9.1. Optimal Choice in Patient Aids
  - 1.9.2. Clear and Documented Information About Prescribed Aids
  - 1.9.3. Guidelines for Training Aids
  - 1.9.4. Specific Training in Distance, Medium and Near Vision
  - 1.9.5. Expectations and Perceptions
  - 1.9.6. Multidisciplinary Follow-up and Intervention, Training
  - 1.9.7. Concepts of TR, and Patient Orientation
- 1.10. Geriatric Optometry Aging and Vision Problems
  - 1.10.1. Pillars of Geriatrics
  - 1.10.2. Aging and Visual Impairment
  - 1.10.3. Significant Physical Changes
  - 1.10.4. Assessment of Personal Autonomy
  - 1.10.5. Most Relevant Neuropsychological Characteristics
  - 1.10.6. Optometric Examination in Geriatric Patients
  - 1.10.7. Appropriate Corrections in Geriatric Patients
  - 1.10.8. Welfare Support



*This program will allow you to advance in your career comfortably"*

# 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 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.

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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*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.*





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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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.



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 adapted in 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 assess and re-assess 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

The Postgraduate Certificate in Low Vision and Geriatric Optometry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

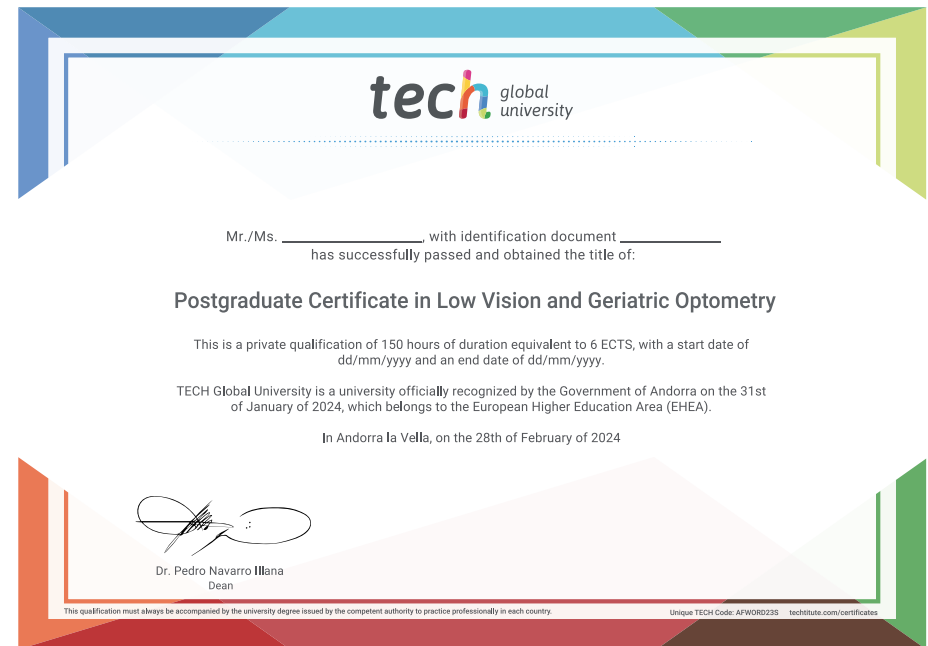
This **Postgraduate Certificate in Low Vision and Geriatric Optometry** is the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** diploma issued by **TECH Global University via tracked delivery**.

The diploma issued by **TECH Global 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.

Program: **Postgraduate Certificate in Low Vision and Geriatric Optometry**

Official No. of Hours: **150 hours**.



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



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