Postgraduate Certificate
Biostatistics for Optical and Optometric Research

tech technological university

Postgraduate Certificate
Biostatistics for Optical and Optometric Research

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH - Technological University**

6 ECTS Credits

Teaching Hours: **150**

Website: **www.techtitute.com/us/medicine/postgraduate-certificate/biostatistics-optical-optometric-research**

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01
Introduction

This program presents biostatistics from the point of view of Optometry, with practical research examples. It addresses the necessary professional tools to design, take measurements, analyze data and obtain scientifically supported conclusions.

" *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"*

Research is essential for the development of science and, especially, in the health sciences. Optics and Optometry, as a health profession, require continuous research to improve the visual health of the population, applying evidence-based practices. Biostatistics is a fundamental tool for any health professional interested in research or who has a critical spirit towards new procedures and publications.

Continuous training in the latest optometric technologies and treatments is essential in professional updating, preparing to take on jobs that are increasingly integrated into the healthcare system, both public and private.

The Postgraduate Certificate in Biostatistics for Optical and Optometric Research covers the main fields of optometrist action, always highly updated and with a first level teaching staff. The study plan has been designed from the perspective and experience of experts highly specialized in their modules, and immersed in the clinical world, which has led us to know the current and future training challenges.

This training has been clearly and robustly directed to the clinical field, preparing students to develop in this field with extensive theoretical and practical knowledge of optometry.

Students will follow modules, each of them structured in 10 topics. Each topic consists of a theoretical introduction, explanations by the professor, activities, etc., in such a way that learning becomes an enjoyable journey to high-level knowledge in Optical Instrumentation and Clinical Optometry.

In conclusion, this Postgraduate Certificate provides professionals with the theoretical and clinical knowledge necessary to address any of the specialties within Optics and Optometry, as well as opening the door to clinical research.

This **Postgraduate Certificate in Biostatistics for Optical and Optometric Research** is the most comprehensive and up-to-date educational program on the market. The most important features of the program include:

- More than 100 clinical cases presented by experts in the different specialties.
- The graphic, schematic, and eminently 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 Biostatistics for Optical and Optometric Research.
- 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.

This Postgraduate Certificate in Biostatistics for Optical and Optometric Research will help you keep up to date in order to provide comprehensive quality care to patients"

"This Postgraduate Certificate is the best investment you can make when choosing a refresher program to update your existing knowledge of Biostatistics for Optical and Optometric Research"

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 didactic material, an innovative methodology and a 100% online training, which will facilitate your study.

The teaching staff includes professionals belonging to the field of Biostatistics for Research in Optics and Optometry, who bring to this training the experience of their work, as well as recognized specialists from prestigious reference societies and 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 an immersive training experience designed to train for real-life situations.

This program is designed around Problem Based Learning, where the medical professional must try to solve the different professional practice situations that arise during the course. For this purpose, the specialist will be assisted by an innovative interactive video system created by renowned and experienced experts in treating patients in children with extensive experience.

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Objectives

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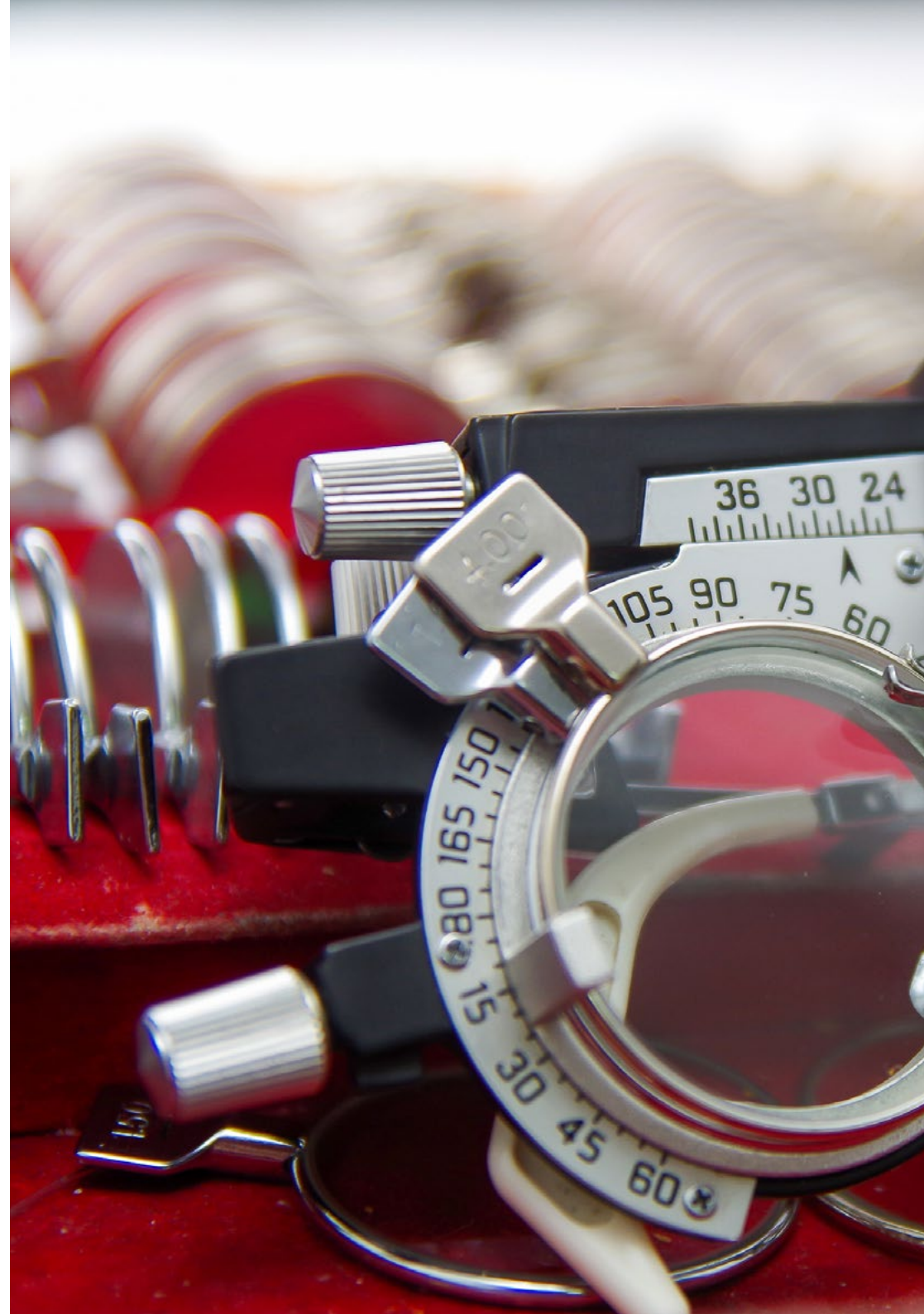
tech

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 Objective

- Analyze research data in the field of Vision Sciences

Specific Objectives

♦ Define the concepts of statistics, biostatistics and epidemiology

♦ Understand the need to know biostatistics for clinical practice

♦ Understand the difference between intuitive response and response based on data analysis

♦ Know how to apply the appropriate graphic representation to the type of data resulting from a clinical study

♦ Deepen in the procedures of parametric and non-parametric analysis of data obtained through research.

♦ Know how to perform simple, multiple and logistic regression analysis

♦ In-depth knowledge of the procedures for the comparison of clinical instrumentation

04
Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.

Leading professionals in the field have come together to teach you the latest advances in Pediatric Orthopedics"

Management

Dr. Calvache Anaya, José Antonio

- Doctor in Optometry and Vision Sciences
- Postgraduate Diploma in Statistics Applied to Health Sciences
- Optometrist at Clínica Baviera in Palma de Mallorca

Structure and Content

The content structure has been designed by a team of professionals who recognize the implications of training in the medical practice of Biostatistics for Optical and Optometric Research, who are aware of the current relevance of specialization to be able to treat pediatric patients with urgent pathology, and who are committed to quality teaching through new educational technologies.

This Postgraduate Certificate in Biostatistics for Optical and Optometric Research will help you keep from up to date in order to provide comprehensive quality care to patients"

Module 1. Biostatistics for Optics and Optometry Research

06
Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: *Re-learning*.
This teaching system is used 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 Re-learning, 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

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, 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 can 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 potential 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 professional medical 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. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.

2. The learning process has a clear focus on 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.

Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

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.

The physician 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we 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.

In this program you will have access to the best educational material, prepared with you 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 really specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.

Interactive Summaries

We present 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, international guides. in our virtual library you will have access to everything you need to complete your training.

20%

15%

15%

3%

20%

17%

7%

3%

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 your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our difficult future decisions.

Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.

Certificate

Through a different and stimulating learning experience, you will be able to acquire the necessary skills to take a big step in your training. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to another professional level.

Include in your qualifications a Postgraduate Certificate in Biostatistics for Optical and Optometric Research: A high-quality added value for any medical professional"

This **Postgraduate Certificate in Biostatistics for Optical and Optometric Research** is the most comprehensive and up-to-date educational program on the market.

After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt their corresponding **certificate** issued by TECH Technological University.

The certificate issued by **TECH Technological University** will specify the qualification obtained through the course, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Biostatistics for Optical and Optometric Research**

ECTS: **6**

Official Number of Hours: **150**

tech technological university

Awards the following
DIPLOMA
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in
Biostatistics for Optical and Optometric Research

This is a qualification awarded by this University, with 6 ECTS credits and equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma Apostilled, TECH EDUCATION will make the necessary arrangements to obtain it at an additional cost of €140 plus shipping costs of the Apostilled diploma.

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