

# Postgraduate Certificate Clinical Assessment in Athletes

Endorsed by the NBA





## Postgraduate Certificate Clinical Assessment in Athletes

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/clinical-assessment-athletes](http://www.techtute.com/us/medicine/postgraduate-certificate/clinical-assessment-athletes)

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# 01

# Introduction

For any specialist, it is essential, especially in a context where sport is on the rise, to delve deeper into athlete assessments by collecting the most innovative clinical, functional and imaging tests aspects in the field. This allows for a much more personalized approach to the needs of each patient, with a more extensive approach in those areas of action or particular ailments of greater interest to athletes. This 100% online program presents the main innovations and developments in the field of Clinical Assessment, outlining the most relevant data that should be known in applying the different, current imaging tests today. Its characteristic format makes it possible to balance the program with the most demanding professional or personal responsibilities, since there are no fixed schedules or face-to-face classes that constrain our students' life.





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*Get up to speed on the most current, specific and functional tests to rule out pathology in athletes and to adapt training accordingly”*

In order to update physicians in all the key aspects of Clinical Assessment in Athletes, this program covers topics of great current interest. Issues such as tests to rule out cardiological pathologies, stress evaluation tests with oxygen consumption or the role of MRI and CT in sports injuries will be discussed throughout the syllabus.

Therefore, specialists will know the clinical and functional tests that should be performed on athletes, delving deeper into the production mechanisms of strength, speed, power, physical condition and sports performance. At the same time, they will become familiar with the main imaging tests that can be performed on athletes and will delve into the main specific functional tests to rule out pathologies and adapt training accordingly.

The great advantage of this Postgraduate Certificate is its 100% online teaching format. Specialists will be in charge of choosing the time and place that best suits their availability, schedules and interests. Through a study method of proven efficiency, you will obtain a complete update in the areas of Clinical and Sports Assessment of the greatest interest.

This **Postgraduate Certificate in Clinical Assessment in Athletes** contains the most complete and up-to-date academic program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in Sports medicine
- ♦ 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
- ♦ 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



*An innovative program that offers you the best update in this area, with the convenience of a learning experience fully adaptable to your needs”*

“

*TECH offers you a great opportunity as a specialist to get up to date on the usefulness of stress testing healthy athletes in cardiological assessments”*

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.

The design of this program focuses on Problem-Based Learning, which means the student must try to solve the different real-life situations of that arise throughout the academic program. For this purpose, the student will be assisted by an innovative, interactive video system created by renowned and experienced experts.

*Obtain an effective update with a real qualification objective through this unique Postgraduate Certificate focused on the most current clinical practice.*

*A unique opportunity for you to gain deeper insight into the role of MRI and CT in sports injuries, with teaching, clinical and research experience.*



# 02 Objectives

The program design for this Postgraduate Certificate aims to update specialists in the skills required for clinical assessment in athlete and its application in Sports Medicine. Thanks to TECH's advanced teaching methodology, specialists will achieve their update objective even before completing the course by incorporating the new advances in Clinical Assessment into their daily practice almost immediately.







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*You will acquire the necessary skills to update your professional practice after expanding your knowledge of specific techniques”*



## General Objectives

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- ♦ Study the different injuries that can occur in different sports
- ♦ Know the most frequent upper limb pathologies in athletes
- ♦ Explore the radiological findings for upper limb pathologies
- ♦ Know the most frequent lower limb injuries in athletes, their etiology and injury mechanisms
- ♦ Learn how to perform correct clinical assessments
- ♦ Know the most effective diagnostic methods and treatment options
- ♦ Know different situations in which exercise and sport have differential aspects from the general population
- ♦ Know the benefits and risks of sport in certain diseases
- ♦ Explore the different therapeutic modalities to prevent and treat sports injuries, their indications and benefits
- ♦ Acquire more specific and current knowledge in the field of sports nutrition and dietetics for specific cases of sports activity and sports nutritional supplementation
- ♦ Gain in-depth knowledge of the meaning of doping, its origins, doping substances and their consequences on health, detection techniques, legal bases of regulation and the methods to fight against it, as well as its prevention strategies





## Specific Objectives

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- ◆ Know the clinical and functional tests to be performed on athletes
- ◆ Explore the mechanisms of strength, speed, power and physical condition production in athletes and their performance
- ◆ Know the main imaging tests that can be performed on athletes
- ◆ Explore the main specific functional tests to rule out pathologies in athletes and to adapt the types of training



*You will have unlimited access from anywhere at any time thanks to the most powerful digital platform and the most developed interactive systems available today"*

03

# Course Management

The teaching staff in charge of this Postgraduate Certificate has extended and recognized experience in specific techniques used in clinical assessments. In the pursuit of excellence, our professors provide specialists with their experience to create situations that will bring them up to date in the field.





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*The professors on the program will provide you with a complete update on the best techniques to use on your patients in the different sessions”*

## International Guest Director

As President of the Department of Physical Medicine and Rehabilitation at the Mayo Clinic in Arizona, Dr. Arthur De Luigi is one of the leading exponents in the field of Sports Medicine. In fact, he is the director of this specialty at the same clinic, also dedicating himself to the areas of pain medicine, brain injury medicine and musculoskeletal ultrasound.

Internationally, he is recognized as a leading figure in Adaptive Sports Medicine, serving as the director and lead physician for both the U.S. Paralympic Alpine Ski Team and the U.S. Para-Snowboard Team. In this role, he has served as a physician on the U.S. Olympic Committee, performing his work at the Colorado Olympic Training Center.

In fact, his involvement in sports is considerable, as he has treated players in basketball, soccer, soccer, golf, baseball, field hockey and other sports. Thus, he is the medical director of the Washington Wizards and Washington Mystics teams, being part of the medical staff of Phoenix Rising FC, Arizona Coyotes, Washington Nationals and DC United. He has also served as co-medical director of the Phoenix Open and chief medical advisor for the American 7 Football League.

In addition, he has had a prominent role on concussion task forces and research groups, including the NBA's own. His experience also extends to the U.S. Army, having held the rank of major and participated as a medic in Operation Iraqi Freedom. For this, he received numerous awards, including the Bronze Star and the Superior Unit Decoration.



## Dr. De Luigi, Arthur

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- ♦ Director of Sports Medicine - Mayo Clinic Arizona
- ♦ President of the Department of Physical Medicine and Rehabilitation at the Mayo Clinic - Scottsdale/Phoenix, Arizona.
- ♦ Phoenix Rising FC Team Physician
- ♦ Arizona Coyotes Team Physician
- ♦ Medical Director at Kilogear Cut
- ♦ Special Olympics Arizona Medical Director
- ♦ Co-Medical Director, Waste Management Phoenix Open
- ♦ Chief Medical Advisor for the American 7 Football League
- ♦ Professor of Rehabilitation Medicine at Georgetown University
- ♦ Director of Electrodiagnostic, Physical Medicine and Rehabilitation at Blanchfield Army Community Hospital, Fort Campbell
- ♦ Director of Research at Fort Belvoir Community Hospital
- ♦ Director of Sports Medicine at MedStar Montgomery Medical Center
- ♦ Team Physician, Washington Mystics
- ♦ Chief Medical Officer, Washington Wizards
- ♦ Doctor of Osteopathic Medicine, Lake Erie College of Osteopathic Medicine
- ♦ U.S. Army Major
- ♦ Graduate in Biology and Chemistry from George Washington University
- ♦ Resident manager at Walter Reed Army Medical Center
- ♦ Master's Degree of Science in Health Management from Lake Erie College of Osteopathic Medicine
- ♦ Superior Unit Decoration from the U.S. Army
- ♦ Bronze Star awarded by the U.S. Army

## Professors

### Dr. Aguirre Sánchez, Irene

- ♦ Specialist in Physical Medicine and Rehabilitation at Nostra Senyora de Meritxell Hospital, Andorra
- ♦ Specialist in Physical Medicine and Rehabilitation at García Orcoyen Hospital, Andorra
- ♦ Degree in Medicine from the University of Navarra
- ♦ Specialist in Physical and Rehabilitation Medicine, Hospital Complex of Navarra
- ♦ Postgraduate Diploma in Physical Exercise Prescription at UPNA
- ♦ Postgraduate Diploma in Musculoskeletal Ultrasound from Francisco de Vitoria University

### Dr. Fernández López, Juan Marcelo

- ♦ Manager and Clinical and Sports Nutritionist at Nutrir
- ♦ Co-founder and Director of the Spanish Society for the Study-Advancement of Sports Nutrition and Dietetics
- ♦ Specialist in Clinical-Sports Nutrition, treating amateur, semi-professional and professional athletes
- ♦ Associate Professor at Isabel I University
- ♦ Bachelor's Degree in Nutrition from the University of Córdoba
- ♦ Master's Degree and PhD in Nutrition and Metabolism, University of Cordoba







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*Make the most of this opportunity to learn about the latest advances in this subject to apply it to your daily practice”*

# 04

## Structure and Content

This Postgraduate Certificate is a complete review of the newest, most effective and specific techniques used in Clinical Assessment. With a multidisciplinary vision and a complete update that includes the advances in the field, physicians will gain deeper insight into everything necessary to practice as specialists in the anthropometric method and its implementation. This course contains the most complete and updated program, designed by experts in Sports Medicine, constituting a great tool for physicians who wish to train in a field with high demand for professionals.





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*An expertly crafted curriculum and quality content are the keys to successfully bringing you up to speed on Clinical Assessment”*

## Module 1. Athlete Assessment

- 1.1. Anthropometric Measurements
  - 1.1.1 Anthropometry and Kinanthropometry
  - 1.1.2 The Anthropometric Method and Its Implementation
  - 1.1.3 Anthropometric Measurements Proportionality Topic: Body Composition
- 1.2. Body Composition
  - 1.2.1. Body Composition Assessment Methods
  - 1.2.2. Body Composition Fractionation
  - 1.2.3. Body Composition, Nutrition and Physical Activity
  - 1.2.4. Somatotype
- 1.3. Clinical Assessment
- 1.4. Usefulness of the Electrocardiogram and Echocardiogram in Cardiological Assessment in Healthy Athletes
- 1.5. Usefulness of Stress Tests in Cardiological Assessments of Healthy Athletes
- 1.6. Usefulness of Stress Tests with Oxygen Consumption in Athletes
- 1.7. Ultrasound in Sports Injuries
- 1.8. MRI in Sports Injuries
- 1.9. TC in Sports Injuries
- 1.10. Useful Tools in Sports Psychology





“ *TECH offers you a unique, crucial and decisive in-depth training experience to update your professional development with the most advanced techniques in the field*”

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 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.*



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.



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.



# 06 Certificate

The Postgraduate Certificate in Clinical Assessment in Athletes 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 program will allow you to obtain your **Postgraduate Certificate in Clinical Assessment in Athletes** 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.

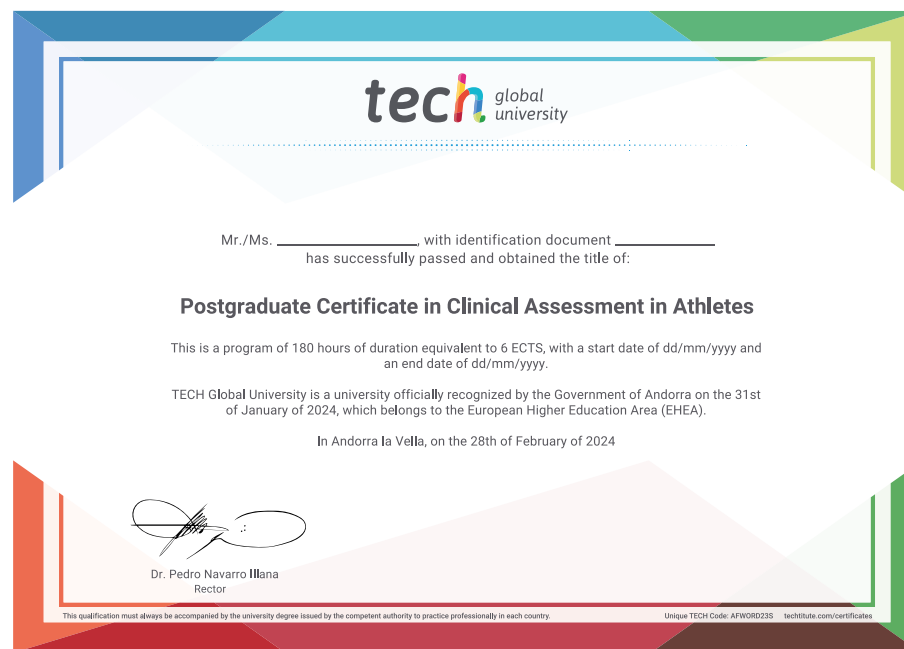
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Clinical Assessment in Athletes**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University 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  
development language  
virtual classroom



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