



## Postgraduate Diploma

Performance Assessments for Fitness Instructors

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/sports-science/postgraduate-diploma/postgraduate-diploma-performance-assessments-fitness-instructors

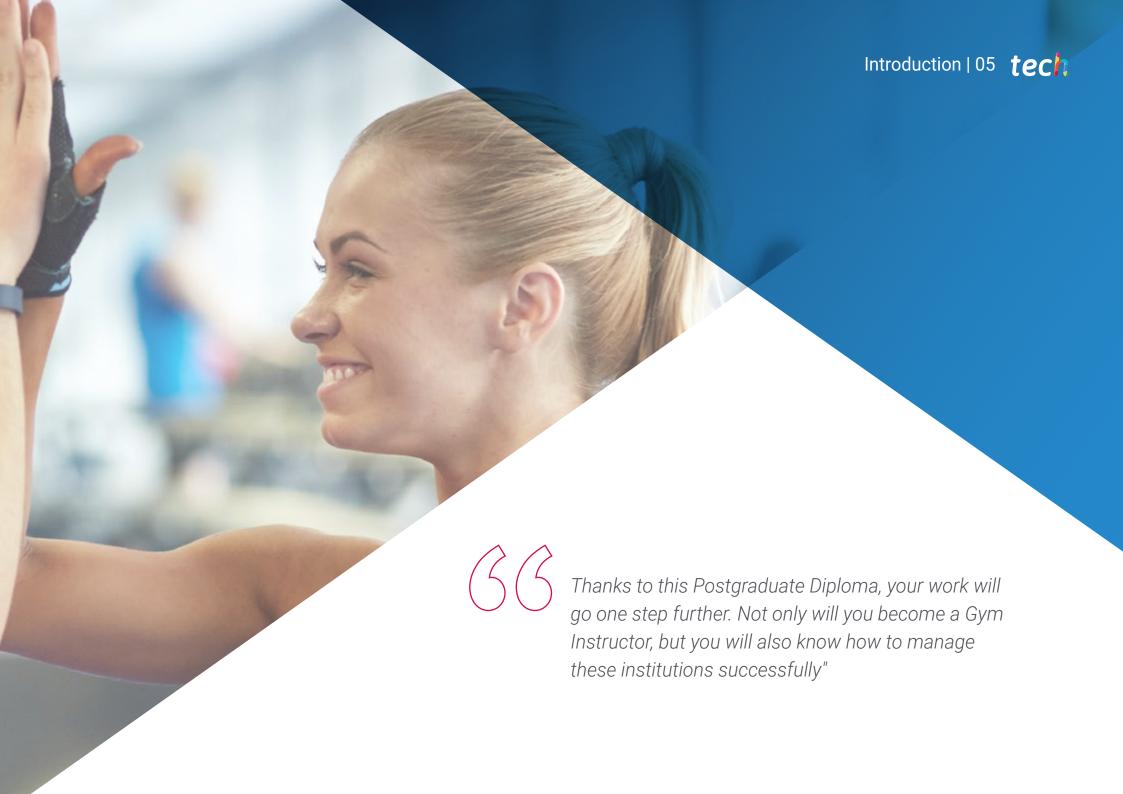
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## tech 06 | Introduction

In recent decades, the benefits attributed to physical activity have been supported by scientific publications that associate increased systematic exercise and good habits with improved quality of life. Likewise, it has been found that the absence of physical activity and negative habits represent a serious threat to overall health. It is for this reason that people find it necessary to go to specialized places, gyms and training centers, where they can perform physical activities in a controlled manner and guided by qualified professionals in the field.

Therefore, gyms, in addition to being a strategy to accompany this reality, represent spaces where psychophysical well-being is promoted and, therefore, it is essential that they can count on the presence of physical activity and health professionals who can meet the needs of users and, in turn, who can advise people on how physical activity should be carried out.

Whether the purpose is to know the state of physical fitness at the beginning of a training process or to know and assess it at any time during the training process.

Likewise, the sports sciences are rapidly advancing in communicating assessment proposals that are increasingly specific in terms of the physiological objective to be targeted, and all this in communion with the contribution and progress of the technological resources that are provided at the service of this instance.

Based on the above, the student graduating from this Postgraduate Diploma will have the possibility to learn about different tools and ways of assessing physical fitness in order to apply them in their different areas of performance.

This **Postgraduate Diploma in Performance Assessments for Fitness Instructors** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in Physical Activity and Sport
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- 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



If you want to make a quality leap in a booming sector, then this program is for you.



In addition, this program gives you the opportunity to learn how to perform specific tests to analyze the physical condition of your clients"

The program includes, in its teaching staff, professionals from the sector who bring their work experience to this refresher program, as well as renowned specialists from reference 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.

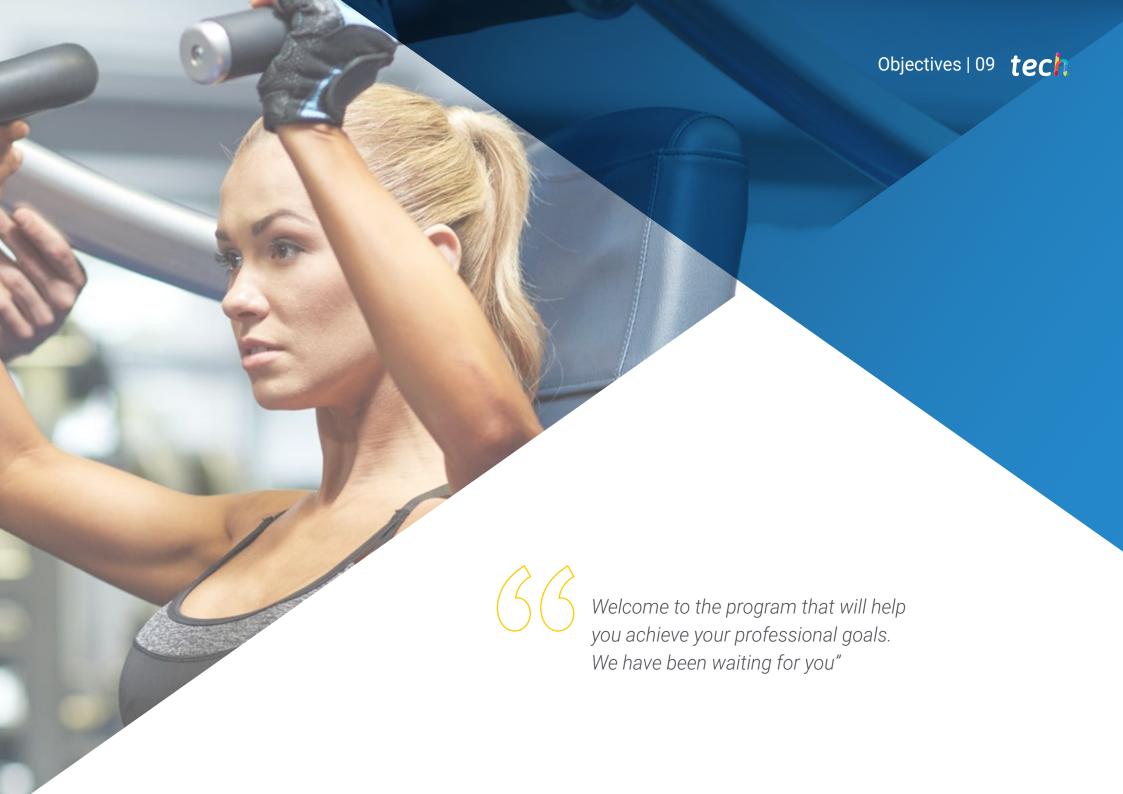
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

As it is an online program, you can study wherever and whenever you want. All you need is a computer with an Internet connection to enjoy the most complete content on the market.

The tools, knowledge and skills you will acquire will enable you to excel in a sector that increasingly requires more and more specialized instructors.







## tech 10 | Objectives

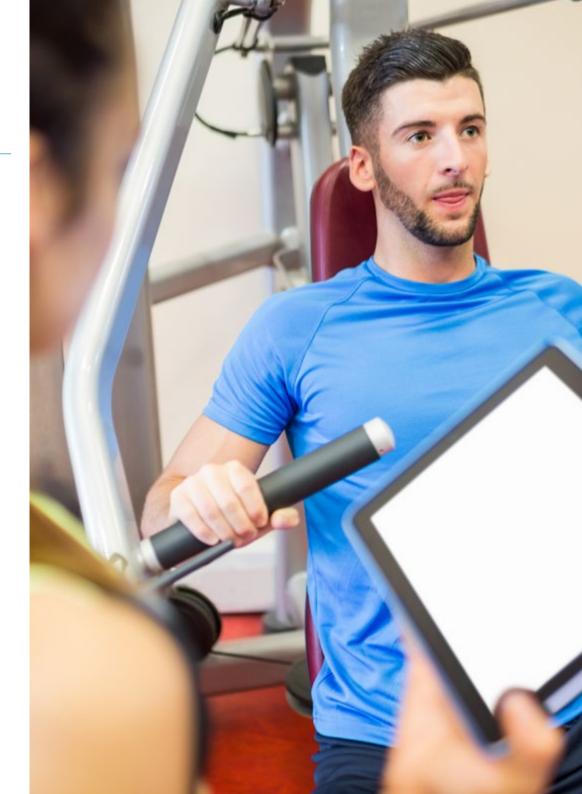


## **General Objectives**

- Acquire knowledge based on the most current scientific evidence with full applicability in the practical field
- Master all the most advanced methods of sports performance evaluation
- Master and apply with certainty the most current training methods to improve sports performance and quality of life, as well as to improve the most common pathologies
- Master the principles governing exercise physiology, as well as biochemistry
- Successfully integrate all the knowledge acquired in the different modules in real practice



The academic excellence of TECH's programs is materialized in the professional development of its students"





#### Module 1. Logistics and Administrative Role of the Indoor Instructor

- Provide the student with information on the main administrative tasks required to organize the different activities proposed and the responsible and professional human resources that work there
- Provide the fitness instructor with the theoretical knowledge as well as the necessary tools to coordinate the logistics of this facility
- Have an in-depth knowledge of the different types of tasks related to administrative logistics
- Understand the importance of the administrative functions of a fitness center as part of their professional background
- Correct management of administrative tasks and human resources of the gym
- Judiciously select and apply different types of management strategies according to their actual work context

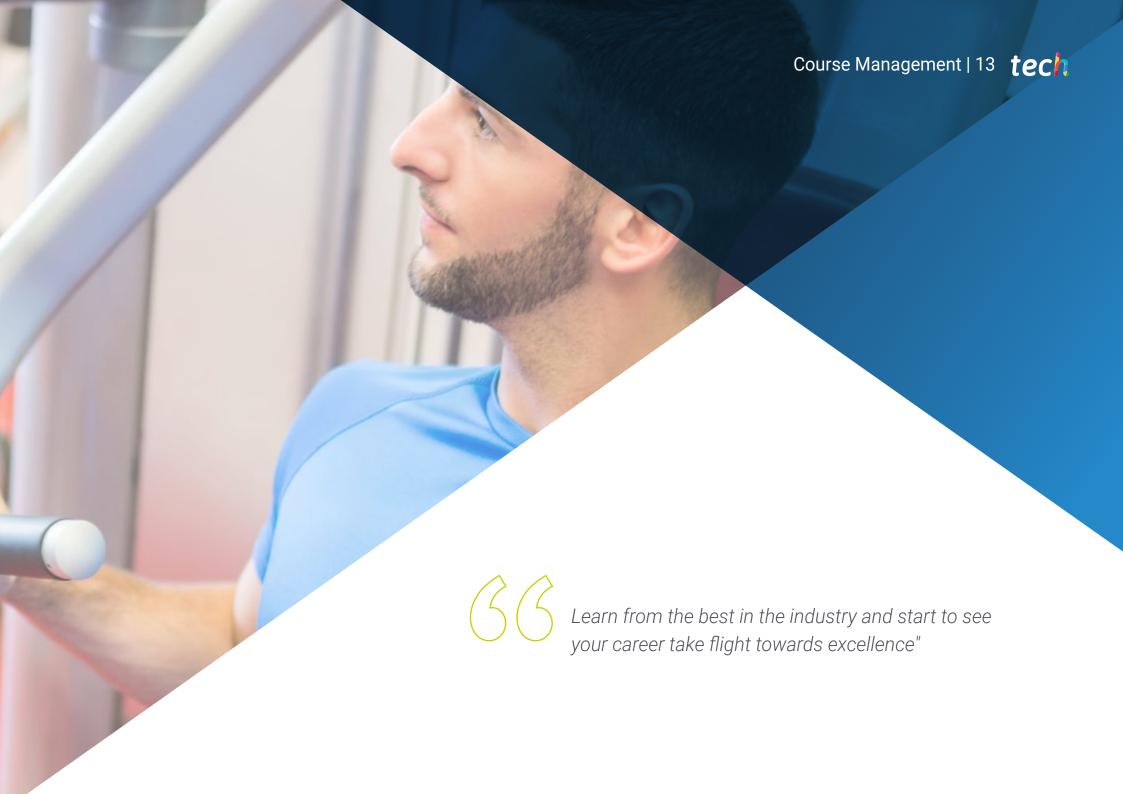
#### Module 2. Group Classes

- Have an in-depth knowledge of different types of group classes and their applicability to the field of practice
- Select those group classes most appropriate to the needs and desires of heterogeneous populations
- Manage correctly and with solid arguments those pedagogical-methodological strategies that characterize the profile of the different group classes proposed
- Know and apply different types of strategies that provide a safe environment for handling the external load that characterizes the modality of each type of group class proposed

### Module 3. Sports Performance Assessment

- In-depth knowledge of the different types of assessment and their applicability to the field of practice
- Select the most appropriate tests/exercises for the client's specific needs
- Correctly and safely administer the protocols of the different tests and the interpretation of the data collected
- Know and apply different types of technologies currently used in the field of exercise assessment both in the field of health and fitness performance at any level of demand





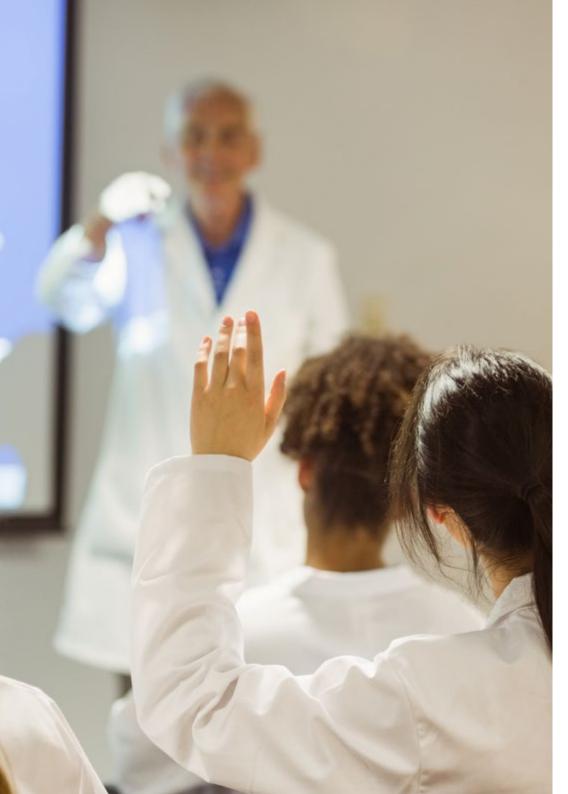
## tech 14 | Course Management

## Management



## Mr. Rubina, Dardo

- CEO of Test and Training
- EDM Physical Training Coordinator
- Physical trainer of the EDM First Team
- Master's Degree in High Performance in Sports (ARD) COE
- EXOS Certification
- Specialist in Strength Training for the Prevention of Injuries, Functional and Physical-Sports Rehabilitation
- Specialist in Strength Training Applied to Physical and Sports Performance
- Certification in Weight Management and Physical Performance Technologies
- Postgraduate course in Physical Activity in Populations with Pathologies
- Diploma in Advanced Studies (DEA) University of Castilla la Mancha
- PhD in High Performance Sports (ARD)



## Course Management | 15 tech

#### **Professors**

#### Mr. Delovo, Nahuel

- Physical Education Teacher
- Physical Trainer Peruvian Rugby Federation
- General Coordinator at Athlon Capacitaciones
- Strength and Conditioning World Rugby, Level1
- Strength and Conditioning World Rugby, Pre Level2

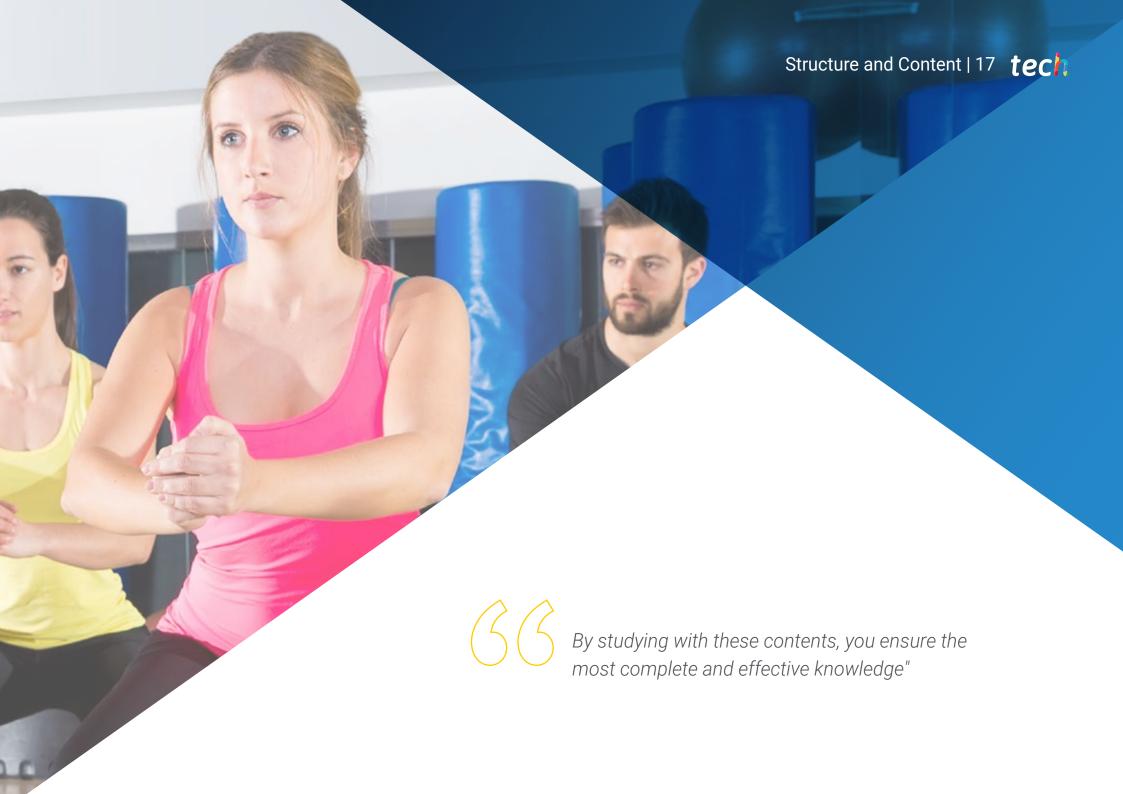
#### Ms. Riccio, Anabella

- Functional training teacher in District B
- Degree in Physical Education
- Specialist in Exercise Programming and Assessment
- Course in biochemistry for exercise programming

## Mr. Masse, Juan Manuel

- Director of the Athlon Science Study Group
- Physical trainer for several professional soccer teams in South America





## tech 18 | Structure and Content

#### Module 1. Logistics and Administrative Role of the Indoor Instructor

- 1.1. Income and Expense Control
  - 1.1.1. Spreadsheet Management
  - 1.1.2. Automated Income and Expense control Systems
- 1.2. Proposed Activities
  - 1.2.1. Variety of Proposals and Disciplines of a Gym
  - 1.2.2. Rooms Inside a Gym
    - 1.2.2.1. Weight Room
    - 1.2.2.2. Group Activities Room
    - 1.2.2.3. Indoor Cycling Room
    - 1.2.2.4. Pilates Room
    - 1.2.2.5. Rehabilitation or Therapy Room
- 1.3. Credits and Accounting Logistics
  - 1.3.1. Organization of Activity Costs
  - 1.3.2. Proposed Plans Linking Different Activities
- 1.4. Input and Data Sheets
  - 1.4.1. Physical Control of Customer Entry
  - 1.4.2. Digitized Control of Customer Entry
- 1.5. Social Networks and Outreach
  - 1.5.1. Management of Instagram and Facebook to Advertise Gym Activities
  - 1.5.2. Simple Design of Publications About Gym Activities and Events on Social Networks
- 1.6. Professional Meetings
  - 1.6.1. Strategies Needed to Convene Professionals in Each Sector in Person
  - 1.6.2. Virtual Strategies for Information Management Among Professionals in Each Sector
- 1.7. Cleaning and Maintenance
  - 1.7.1. Development of a Schedule for General Cleaning and Sanitization of Work Tools
  - 1.7.2. Implementation of a Control and Maintenance System for the Operation of the Gym Facilities
- 1.8. Health and Safety Supplies
  - 1.8.1. Basic Knowledge of Internal Security Instruments
  - 1.8.2. Basic Knowledge of General Hygiene Measures



## Structure and Content | 19 tech

- 1.9. Relationship between Activity Proposal and Customer Profile
  - 1.9.1. Different Potential Customer Profiles
  - 1.9.2. Activities Linked to Each Profile
- 1.10. Essential Elements and/or Materials
  - 1.10.1. Detail of Basic Elements that Will Be Necessary for the Correct Development of the Different Activities
  - 1.10.2. Functions and Uses of Each Most Commonly Used Item

#### Module 2. Group Classes

- 2.1. Principles of Training
  - 2.1.1. Functional Unit
  - 2.1.2. Multilaterality
  - 2.1.3. Specificity
  - 2.1.4. Overload
  - 2.1.5. Continuity
  - 2.1.6. Progression
  - 2.1.7. Recuperation
  - 2.1.8. Individuality
- 2.2. Controlling the Load
  - 2.2.1. Internal Load
  - 222 External Load
- 2.3. Stretching
  - 2.3.1. Stretching
  - 2.3.2. Objectives of Stretching
  - 2.3.3. Pedagogical Organization of the Stretching Class
- 2.4. Gluteus, Abdomen and Legs (GAL)
  - 2.4.1. Objectives of a GAL Class
  - 2.4.2. Pedagogical Organization of the GAL Class
  - 2.4.3. External Load in the GAL Class
- 2.5. Floor Pilates
  - 2.5.1. Features of the *Pilates Mat*
  - 2.5.2. Pilates Mat Exercises and Movement Suggestions
  - 2.5.3. Training Load in a Pilates Mat Class

- 2.6. Rhythms
  - 2.6.1. Types of Classes
  - 2.6.2. Features of Rhythm Classes
  - 2.6.3. Pedagogical Proposals for the Development of a Rhythm Class
- 2.7. Non-Conventional Classes
  - 2.7.1. Characteristics of Non-Conventional Training
  - 2.7.2. Exercise Proposals
  - 2.7.3. Pedagogical Organization of a Non-Conventional Training Class
- 2.8. Functional Training
  - 2.8.1. Functional Training
  - 2.8.2. Pedagogical Organization of the Functional Training Class
  - 2.8.3. Use of Interna Load
- 2.9. Aerobic
  - 2.9.1. Type of Aerobic Fitness Classes
  - 2.9.2. Pedagogical Structure of the Class
- 2.10. Indoor Cycling
  - 2.10.1. Birth of the Specialty in Gyms
  - 2.10.2. Indoor Cycling in Health
  - 2.10.3. Structure of the Indoor Cycling Class
- 2.11. Classes for Older Adults
  - 2.11.1. Profile of the Older Adults Group
  - 2.11.2. Benefits of Physical Activity in Older Adults
  - 2.11.3. Structure of a Group Class with Older Adults
- 2.12. Classes for Older Adults
  - 2.12.1. History of Yoga
  - 2.12.2. Yoga and Health

## tech 20 | Structure and Content

#### Module 3. Sports Performance Assessment 3.4.2. Cycloergometer VO2max Test 3.4.2.1. Astrand Ryhming Test 3.1. Assessment 3.4.2.2. Fox Test 3.1.1. Test, Assessment, Measurement 3.4.3. Cycloergometer Power Test Validity, Reliability 3.4.3.1. Wingate Test Purposes of the Evaluation 3.1.3. 3.4.4. Vo2max Test in the Field 3.2. Types of Tests 3.4.4.1. Leger Test 3.2.1. Laboratory Test 3.4.4.2. Montreal University Test 3.2.1.1. Strengths and Limitations of Laboratory Tests 3 4 4 3 1-MR Test 3.2.2. Field Tests 3.4.4.4. 12-Minute Test 3.2.2.1. Strengths and Limitations of Field Tests 3.4.4.5. 2.4-Kilometer Test 3.2.3. Direct Tests 3.4.5. Field Test to Establish Training Areas 3.2.3.1. Applications and Transfer to Training 3.4.5.1 30-15 Test IFT 3.2.4. Indirect Tests 346 UNCa Test 3.2.4.1. Practical Considerations and Transfer to Training 3.4.7. Yo-Yo Test Assessment of Body Composition 3 4 7 1 Yo-Yo Endurance YYET Level 1 and 2 3.3.1. Bioimpedance 3.4.7.2. Yo-Yo Intermittent Endurance YYEIT Level 1 and 2 3.3.1.1. Considerations in its Application to Field 3.4.7.3. Yo-Yo Intermittent Recovery YYERT Level 1 and 2 3.3.1.2. Limitations on the Validity of Its Data 3.5. Neuromuscular Fitness Evaluation 3.3.2. Anthropometry 3.5.1. Submaximal Repetition Test 3.3.2.1. Tools for its Implementation 3.5.1.1. Practical Applications for its Assessment 3.3.2.2. Models of Analysis for Body Composition 3.5.1.2. Validated Estimation Formulas for the Different Training Exercises 3.3.3. Body Mass Index (IMC) 3.5.2. 1-MR Limitations 3.3.3.1. Restrictions on the Data Obtained for the Interpretation of Body 3.5.2.1. Protocol for its Performance Composition 3.5.2.2. 1MR Valuation Limitations Assessing Aerobic Fitness 3.5.3. Horizontal Jump Test 3.4.1. Vo2max Test on the Treadmill 3.5.3.1. Assessment Protocols 3.4.1.1. Astrand Test 3.5.4. Speed Test (5m,10m,15m, Etc.) 3.4.1.2. Balke Test 3.5.4.1. Considerations on the Data Obtained in Time/Distance Assessments 3.4.1.3. ACSM Test 3.5.5. Maximum/Submaximum Incremental Progressive Tests 3.4.1.4. Bruce Test 3.5.5.1. Validated Protocols 3.4.1.5. Foster Test 3.5.5.2. Practical Applications 3.4.1.6. Pollack Test

## Structure and Content | 21 tech

3.5.6.	Vertical Jump Test		3.6.7.	Strength Platforms
	3.5.6.1. SJ Jump			3.6.7.1. Types and Characteristics.of Strength Platforms
	3.5.6.2. CMJ Jump			3.6.7.2. Variables Measured and Estimated by Means of a Strength Platform
	3.5.6.3. ABK Jump			3.6.7.3. Practical Approach to Training Programming
	3.5.6.4. DJ Test		3.6.8.	Load Cells
	3.5.6.5. Continuous Jump Test			3.6.8.1. Cell Types, Characteristics and Performance
3.5.7.	Strength/Speed Vertical/Horizontal Profiles			3.6.8.2. Uses and Applications for Sports Performance and Health
	3.5.7.1. Morin and Samozino Assessment Protocols		3.6.9.	Photoelectric Cells
	3.5.7.2. Practical Applications from a Strength/Speed Profile			3.6.9.1. Characteristics, and Limitations of the Devices
3.5.8.	Isometric Tests With Load Cell			3.6.9.2. Practical Uses and Applicability
	3.5.8.1. Voluntary Isometric Maximal Strength Test (IMS)		3.6.10.	Mobile Applications
	3.5.8.2. Bilateral Deficit Isometry Test (%BLD)			3.6.10.1. Description of the Most Used Apps on the Market: My Jump, PowerLift,
	3.5.8.3. Lateral Deficit (%LD)			Runmatic, Nordic
	3.5.8.4. Hamstring/Quadriceps Ratio Test	3.7.		and External Load
Assess	ment and Monitoring Tools		3.7.1.	Objective Means of Assessment
3.6.1.	Heart Rate Monitors			3.7.1.1. Speed of Execution
	3.6.1.1. Device Characteristics			3.7.1.2. Average Mechanical Power
	3.6.1.2. Training Areas by Heart Rate			3.7.1.3. GPS Device Metrics
3.6.2.	Lactate Analyzers		3.7.2.	Subjective Means of Assessment
	3.6.2.1. Device Types, Performance and Characteristics			3.7.2.1. PSE
	3.6.2.2. Training Zones According to the Lactate Threshold Limit (LT)			3.7.2.2. sPSE
3.6.3.	Gas Analyzers			3.7.2.3. Chronic/Acute Load Ratio
	3.6.3.1. Laboratory vs Portable	3.8.	Fatigue	
3.6.4.	GPS		3.8.1.	Fatigue and Recovery
	3.6.4.1. GPS Types, Characteristics, Strengths and Limitations		3.8.2.	Assessments
	3.6.4.2. Metrics Established to Interpret the External Load			3.8.2.1. Laboratory Objectives: CK, Urea, Cortisol, etc.
3.6.5.	Accelerometers			3.8.2.2. Field Objectives: CMJ, Isometric Tests, etc.
	3.6.5.1. Types of Accelerometers and Characteristics			3.8.2.3. Subjective: Wellnes Scales, TQR, etc.
	3.6.5.2. Practical Applications of Data Obtained From an Accelerometer		3.8.3.	Recovery Strategies: Cold-Water Immersion, Nutritional Strategies, Self-Massage,
3.6.6.	Position Transducers			Sleep
	3.6.6.1. Types of Transducers for Vertical and Horizontal Movements	3.9.		erations for Practical Applications
	3.6.6.2. Variables Measured and Estimated by of a Position Transducer			Vertical Jump Test Practical Applications
	3.6.6.3. Data Obtained from a Position Transducer and its Applications to Training			Maximum/Submaximum Incremental Progressive Test Practical Applications
	Programming		3.9.3.	Vertical Strength-Speed Profile. Practical Applications

3.6.





## tech 24 | Methodology

## Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.



At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"



You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.



The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

## A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.



Our program prepares you to face new challenges in uncertain environments and achieve success in your career"

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.



## 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.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



## Methodology | 27 tech

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. With this methodology, we have trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, markets, and financial instruments. All this in a highly demanding environment, where the students have a strong socio-economic 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 training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

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.



#### **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 future difficult decisions.



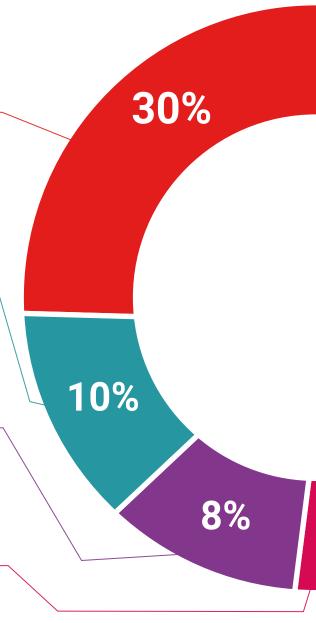
### **Practising Skills and Abilities**

They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



#### **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.





Students will complete a selection of the best case studies chosen specifically for this situation. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### **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".

## **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.



25%

20%





## tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Performance Assessments for Fitness Instructors** 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 Diploma in Performance Assessments for Fitness Instructors

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



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

## Postgraduate Diploma in Performance Assessments for Fitness Instructors

This is a program of 450 hours of duration equivalent to 18 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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