

Postgraduate Certificate

Structure of the Locomotor System



Postgraduate Certificate Structure of the Locomotor System

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

Website: www.techtitute.com/us/medicine/postgraduate-certificate/structure-locomotor-system

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01

Introduction

The widespread practice of Yoga impacts mobility, muscle strengthening, and the overall musculoskeletal system, promoting the reduction of ailments and joint and muscle stiffness in patients. In this regard, it is essential for medical professionals to be aware of how various techniques are applied for injury prevention and how the musculoskeletal system develops or adapts to physical activity and training. All of this is delivered through a 100% online pedagogical format, spanning 6 weeks and featuring the most advanced syllabus on the Musculoskeletal System, created by genuine experts in this discipline. It is a unique academic option accessible 24 hours a day from any Internet-connected digital device.





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A 100% online Postgraduate Certificate program with 150 instructional hours on the Structure of the Musculoskeletal System and Therapeutic Yoga”

The benefits of practicing Yoga have led millions of people worldwide to engage in it, experiencing significant improvements in physical function and performance. Consequently, this activity influences muscle strengthening, posture and mobility, making it ideal for those conditions of the locomotor system.

In this regard, this discipline becomes an ideal therapeutic tool, but it must be deeply understood to complement medical treatments effectively. In this vein, TECH has created this 6-week academic proposal, which equips graduates with a comprehensive understanding of the Locomotor System.

It is an intensive program that allows graduates to delve into anatomical positioning, the relationship between the skeletal and muscular systems, as well as the prevention of cartilage, tendon, and ligament injuries in connection with Therapeutic Yoga practice. Throughout this process, you will have access to innovative multimedia materials, specialized readings, and clinical case study simulations provided by an expert team in this field.

The inclusion of an international Therapeutic Yoga instructor in the university program presents an excellent opportunity for students seeking advanced practical knowledge in this discipline. She is a highly respected expert in the field, and her masterclasses provide a unique opportunity for students to learn from a leader in the field.

Furthermore, this academic institution has designed this proposal to cater to the real needs of medical professionals who seek ongoing education through a flexible and convenient program. To access this Postgraduate Certificate, graduates only need a digital device with internet connectivity, allowing them to access the program syllabus at any time of the day, making it an ideal option to balance with demanding daily.

This **Postgraduate Certificate in the Structure of the Locomotor System** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Case studies presented by Yoga experts
- ♦ 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
- ♦ 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



Delves into the role of fascia in the musculoskeletal system and its relationship with Therapeutic Yoga practice”

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TECH accommodates your schedule and your updating needs in the Structure of the Musculoskeletal System focused on Therapeutic Yoga practice”

Delve into musculoskeletal changes associated with aging using the best multimedia materials.

An intensive 6-week academic itinerary that will deepen your understanding of the most common tendon injuries and their prevention.

The program's teaching staff includes professionals from the field who contribute their work experience to this educational 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 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 during the academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



02 Objectives

This Postgraduate Certificate has been designed to provide medical professionals with an updating process on the Structure of the Locomotor System, injury prevention, and their management through Therapeutic Yoga. This update will be much more effective thanks to a syllabus based on the latest scientific evidence and high-quality pedagogical materials.





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A 6-week academic itinerary with the most innovative pedagogical materials on the Structure of the Locomotor System”



General Objectives

- ♦ Incorporate the knowledge and skills that are necessary for the correct development and application of Therapeutic Yoga techniques from a clinical point of view
- ♦ Create a Yoga program designed and based on scientific evidence
- ♦ Delve into the most suitable Asanas based on individual characteristics and existing injuries
- ♦ Explore in-depth studies on biomechanics and their application to Therapeutic Yoga Asanas
- ♦ Describe the adaptation of Yoga Asanas to each person's specific pathologies
- ♦ Delve into the neurophysiological foundations of existing meditative and relaxation techniques





Specific Objectives

- Delve into the anatomy and physiology of the skeletal, muscular, and articular system of the human body
- Identify the different structures and functions of the musculoskeletal system and how they interrelate
- Explore the different postures and movements of the human body and understand how they affect the structure of the musculoskeletal system
- Deepen your understanding of common musculoskeletal system injuries and how to prevent them



Explore the most common cartilage injuries and their prevention at your convenience, whenever and wherever you wish"

03

Course Management

TECH has assembled a faculty with extensive experience in Therapeutic Yoga and Biological Sciences for this university degree. As a result, students enrolled in this program will have access to a syllabus crafted by genuine experts, providing them with the most current information on injury prevention and the impact of physical activity on the Locomotor System. Additionally, thanks to the proximity of the faculty, students can address any questions they may have about the program's syllabus





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Get an effective update on Anatomy and Physiology in Therapeutic Yoga from true experts in this field”

International Guest Director

As the **director of teachers** and **head of instructor training** at the Integral Yoga Institute in New York, Dianne Galliano stands as one of the most prominent figures in this field on an international level. Its primary academic focus has been **on therapeutic yoga**, with over 6,000 documented hours of teaching and ongoing training.

Her work has involved mentoring, developing training protocols and criteria, and providing ongoing education to instructors at the Integral Yoga Institute. In addition to her role at the Integral Yoga Institute, they also works as a therapist and instructor at other institutions such as The 14TH Street Y, Integral Yoga Institute Wellness Spa, and the Educational Alliance: Center for Balanced Living.

Her work extends to **creating and directing yoga programs**, developing exercises, and evaluating potential challenges. Throughout her career, she has worked with various profiles of individuals, including older and middle-aged men and women, prenatal and postnatal individuals, young adults, and even war veterans dealing with a range of physical and mental health issues.

For each of them, she provides careful and personalized care, having worked with people dealing with conditions such as osteoporosis, post-heart surgery recovery, post-breast cancer, vertigo, back pain, Irritable Bowel Syndrome, and obesity. She holds several certifications, with notable ones being E-RYT 500 by Yoga Alliance, Basic Life Support (BLS) by the American Health Training, and Certified Exercise Instructor by the Center for Somatic Movement.



Ms. Galliano, Dianne

- Yoga Therapist at The 14TH Street Y
- Yoga Therapist at Integral Yoga Institute Wellness Spa in New York
- Therapeutic Instructor at Educational Alliance: Center for Balanced Living
- Graduate in Elementary Education from the State University of New York
- Master's Degree in Therapeutic Yoga from the University of Maryland

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Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Ms. Escalona García, Zoraida

- ♦ Vice President of the Spanish Association of Yoga Therapy
- ♦ Founder of the *Air Core* method (classes that combine TRX and functional training with Yoga)
- ♦ Therapeutic Yoga Instructor
- ♦ Degree in Biological Sciences from the Autonomous University of Madrid
- ♦ Course in Progressive Ashtanga Yoga Teacher, PhysioMyoga, Myofascial Yoga, Yoga and Cancer
- ♦ Pilates Mat Instructor Course
- ♦ Herbalism and Nutrition Course
- ♦ Meditation Teacher Course

Professors

Ms. García, Mar

- ♦ Director and Instructor at Satnam Yoga Center
- ♦ Vinyasa Yoga Teacher
- ♦ Special Yoga Instructor
- ♦ Yoga Instructor for Children and Families



04

Structure and Content

Thanks to the *Relearning* method, which focuses on the continuous repetition of key content, graduates will be able to reduce the long hours of study and easily solidify the concepts covered. This way, they may achieve a comprehensive update in the Structure of the Locomotor System with a focus on Therapeutic Yoga. Furthermore, students have additional educational materials available, which will allow them to further expand the information provided in this program.





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A comprehensive Virtual Library, accessible 24 hours a day, from any Internet-connected digital device”

Module 1. Structure of Locomotor System

- 1.1. Anatomical Position, Axes and Planes
 - 1.1.1. Basic anatomy and physiology of the human body
 - 1.1.2. Anatomic position
 - 1.1.3. Body Axes
 - 1.1.4. Anatomical Planes
- 1.2. Bone
 - 1.2.1. Bone Anatomy of the Human Body
 - 1.2.2. Structure and Function of Bones
 - 1.2.3. Different Types of Bones and Their Relationship to Posture and Movement
 - 1.2.4. The Relationship Between the Skeletal System and the Muscular System
- 1.3. Joints
 - 1.3.1. Anatomy and Physiology of Human Body Joints
 - 1.3.2. Different Types of Joints
 - 1.3.3. The Role of Joints in Posture and Movement
 - 1.3.4. Common Joint Injuries and How to Prevent Them
- 1.4. Cartilage
 - 1.4.1. Anatomy and Physiology of Human Body Cartilage
 - 1.4.2. Different Types of Cartilage and Their Function in the Body
 - 1.4.3. The Role of Cartilage in Joint Function and Mobility
 - 1.4.4. Common Cartilage Injuries and Their Prevention
- 1.5. Tendons and Ligaments
 - 1.5.1. Anatomy and Physiology of Human Body Tendons and Ligaments
 - 1.5.2. Different Types of Tendons and Ligaments and Their Function in the Body
 - 1.5.3. The Role of Tendons and Ligaments in Posture and Movement
 - 1.5.4. Common Tendon and Ligament Injuries and How to Prevent Them
- 1.6. Skeletal Muscle
 - 1.6.1. Anatomy and Physiology of the Musculoskeletal System in the Human Body
 - 1.6.2. The Relationship Between Muscles and Bones in Posture and Movement
 - 1.6.3. The Role of Fascia in the Musculoskeletal System and Its Relationship to Therapeutic Yoga Practice
 - 1.6.4. Common Muscle Injuries and How to Prevent Them
- 1.7. Development of the Musculoskeletal System
 - 1.7.1. Embryonic and Fetal Development of the Musculoskeletal System
 - 1.7.2. Growth and Development of the Musculoskeletal System in Childhood and Adolescence
 - 1.7.3. Musculoskeletal Changes Associated with Aging
 - 1.7.4. Development and Adaptation of the Musculoskeletal System to Physical Activity and Training
- 1.8. Components of the Musculoskeletal System
 - 1.8.1. Anatomy and Physiology of Skeletal Muscles and Their Relationship to Therapeutic Yoga Practice
 - 1.8.2. The Role of Bones in the Musculoskeletal System and Their Relationship to Posture and Movement
 - 1.8.3. The Function of Joints in the Musculoskeletal System and How to Care for Them During Therapeutic Yoga Practice
 - 1.8.4. The Role of Fascia and Other Connective Tissues in the Musculoskeletal System and Their Relationship to Therapeutic Yoga Practice
- 1.9. Nervous Control of Skeletal Muscles
 - 1.9.1. Anatomy and Physiology of the Nervous System and Its Relationship to Therapeutic Yoga Practice
 - 1.9.2. The Role of the Nervous System in Muscle Contraction and Movement Control
 - 1.9.3. The Relationship Between the Nervous System and the Musculoskeletal System in Posture and Movement During Therapeutic Yoga Practice
 - 1.9.4. The Importance of Neuromuscular Control for Injury Prevention and Performance Improvement in Therapeutic Yoga Practice
- 1.10. Muscle Contraction
 - 1.10.1. Anatomy and Physiology of Muscle Contraction and Its Relationship to Therapeutic Yoga Practice
 - 1.10.2. Different Types of Muscle Contraction and Their Application in Therapeutic Yoga Practice
 - 1.10.3. The Role of Neuromuscular Activation in Muscle Contraction and Its Relationship to Therapeutic Yoga Practice
 - 1.10.4. The Importance of Muscle Stretching and Strengthening for Injury Prevention and Performance Improvement in Therapeutic Yoga Practice



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.





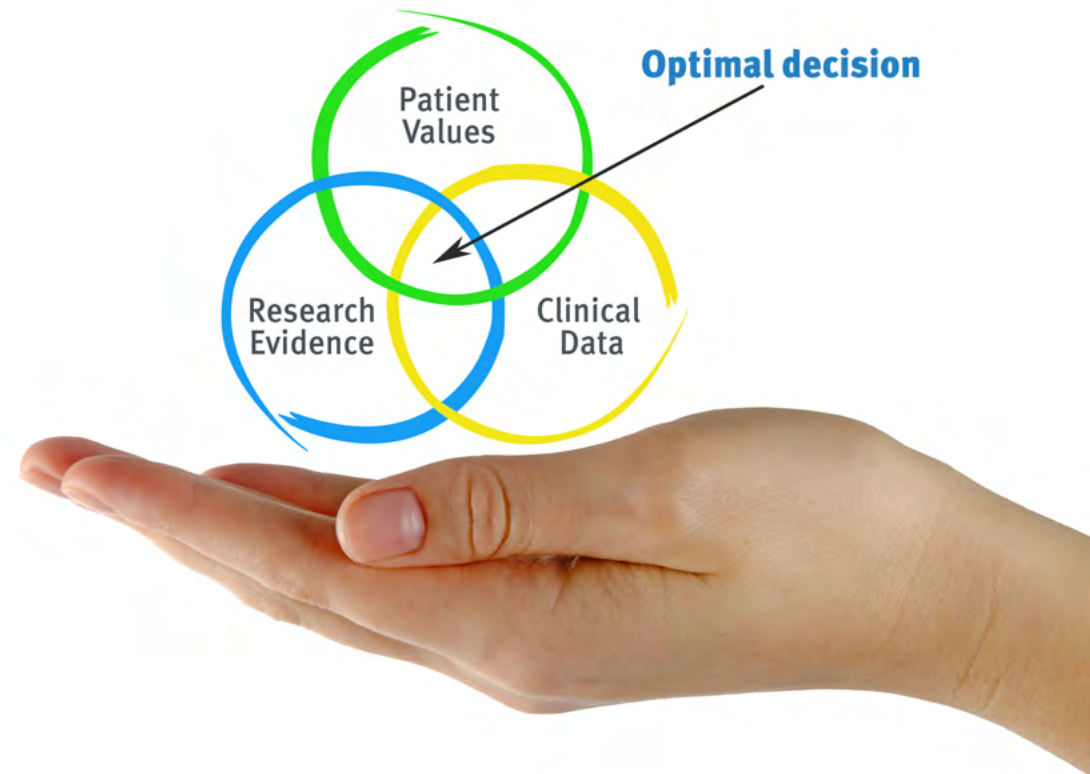
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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 Diploma in Structure of the Locomotor System guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 the Structure of the Locomotor System** contains 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** issued by **TECH Technological University** via tracked delivery*.

The diploma 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 the Structure of the Locomotor System**

Official N° of Hours: **150 h.**



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



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