

Postgraduate Certificate

Structure of the Locomotor System for Nursing





Postgraduate Certificate Structure of the Locomotor System for Nursing

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

Website: www.techtute.com/us/nursing/postgraduate-certificate/structure-locomotor-system-nursing

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01

Introduction

The prolonged practice of Yoga has an impact on flexibility, muscle strengthening and the movement system in general, which contributes to reduce stiffness and ailments in the joints and muscles of patients. That is why it is essential that nursing professionals identify common injuries in each structure, and know how to apply the different techniques to prevent injuries and the adaptation of the musculoskeletal system to physical activity and training. To achieve this, TECH offers a 100% online educational program, with an advanced syllabus on the Locomotor System and its impact on Yoga. Given its format, it is available 24 hours a day without face-to-face classes or fixed schedules.



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Delve with the best multimedia material in the structures of the musculoskeletal system from the point of view of Therapeutic Yoga”

Millions of people around the world have adopted the practice of Yoga thanks to its multiple benefits, which significantly improve physical performance. The physical training strengthens the musculature, improves posture and mobility, which makes it ideal for those who suffer from disorders of the locomotor system.

In this sense, Therapeutic Yoga is an ideal treatment tool for patients with different locomotor pathologies. However, it is essential to know it in depth in order to be able to combine it with conventional medical treatments, especially when providing assistance as a nurse. Therefore, TECH has created an academic proposal that provides the nursing professional with a complete update on the structure of the Locomotor System.

This intensive program allows students to delve into anatomy, the relationship between the skeletal and muscular system, and the prevention of injuries such as, for example, ligament injuries, and their relationship with the practice of Therapeutic Yoga. The learning process is carried out through innovative multimedia material and specialized readings, provided by a team of experts in the field.

In addition, this Postgraduate Certificate has an international teacher of great prestige in the area of Yoga. Through a series of master classes, she will provide her unique vision and distinctive perspective on the impact of Therapeutic Yoga on the Locomotor System.

Therefore, the institution has designed the proposal to meet the real needs of nurses, who seek continuous updating through a flexible and convenient program. To access this Postgraduate Certificate, the graduate only needs a digital device with an Internet connection, which allows them to study the program's syllabus at any time of the day. This option is ideal for those who seek to coordinate it with the most demanding daily demands.

This **Postgraduate Certificate in Structure of the Locomotor System for Nursing** is the most comprehensive and up-to-date scientific program on the market. Its most notable features are:

- ◆ The development of case studies presented by experts in Structure of the Locomotor System
- ◆ 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



TECH adapts to your schedule and your needs for updating in anatomy and physiology of the Locomotor System"

“*An intensive academic plan that will lead you to delve into the most appropriate Yoga postures and movements for the locomotor system.*”

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.

Enroll now! And get the most complete academic material on Locomotor System Structure for Nursing.

Solve all your doubts about the musculoskeletal structures and the various treatments to implement Therapeutic Yoga.



02 Objectives

This Postgraduate Certificate in the Structure of the Locomotor System for Nurses is oriented to provide nursing professionals with an update in the Structure of the Osteomuscular System, emphasizing the anatomy of the muscular, bone and joint systems, their functions, the exploration of different postures and movements, and the correct application of Therapeutic Yoga to the treatment of different pathologies that affect this musculoskeletal system.





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Get updated on the different injuries of the Locomotor System and the approach from Therapeutic Yoga in its various treatments”



General Objectives

- ◆ Incorporate knowledge and specific skills in the area of the Locomotor System for the correct development and application of treatment techniques.
- ◆ Delve into the most appropriate treatments according to the characteristics of the person and the injuries present.
- ◆ Delve into the studies on biomechanics and the application of treatment for the Locomotor System.
- ◆ Delve into the neurophysiological basis of musculoskeletal structures





Specific Objectives

- ◆ Delve into the anatomy and physiology of the skeletal, muscular, and articular systems of the human body
- ◆ Identify the different structures and functions of the locomotor system and how they interrelate with one another
- ◆ Explore the different postures and movements of the human body, and understand how they affect the structure of the locomotor system
- ◆ Delve into common musculoskeletal system injuries and how to prevent them

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Delve into the neurophysiology of musculoskeletal structures”

03

Course Management

TECH has brought together for this Postgraduate Certificate a faculty with accumulated experience in the field of Biological Sciences of the Osteomuscular System and Yoga. In this way, students who take this program will have access to a syllabus prepared by experts who will provide the most current information on injury prevention and the impact of this physical activity on the musculoskeletal system. In addition, thanks to the proximity of the teaching staff, you will be able to resolve any questions you may have about any topic included in this program.





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You will delve into the necessary guidelines to assist the locomotor problems of your patients with Therapeutic Yoga exercises”

International Guest Director

As the **Director of Teachers** and **Head of Instructor Training** at the Integral Yoga Institute in New York, Dianne Galliano is positioned as one of the most important figures in the field internationally. Her academic focus has been primarily therapeutic yoga, with over 6,000 documented hours of teaching and continuing education.

In this way, her work has been to mentor, develop training protocols and criteria, and provide continuing education to Integral Yoga Institute instructors. She combines this work with her role as a therapist and **instructor** in other institutions such as The 14TH Street Y, Integral Yoga Institute Wellness Spa or the Educational Alliance: Center for Balanced Living.

Her work also extends to **creating** and **directing** yoga **programs**, developing exercises and evaluating challenges that may arise. She has worked throughout her career with many different profiles of people, including older and middle-aged men and women, prenatal and postnatal individuals, young adults, and even veterans with a range of physical and mental health issues.

For each one of them she performs a careful and personalized work, having treated people with osteoporosis, in the process of recovery from heart surgery or post-breast cancer, vertigo, back pain, Irritable Bowel Syndrome and obesity. She has several certifications, including E-RYT 500 by Yoga Alliance, Basic Life Support (BLS) by American Health Training and Certified Exercise Instructor by the Somatic Movement Center



Ms. Galliano, Dianne

- Director of the Integral Yoga Institute, New York, U.S.A.
- Therapeutic Yoga Instructor at The 14TH Street Y
- Yoga Therapist at Integral Yoga Institute Wellness Spa in New York City
- Therapeutic Instructor at Educational Alliance: Center for Balanced Living
- Degree in Primary School Education from the State University of New York
- Master's Degree in Yoga Therapy 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

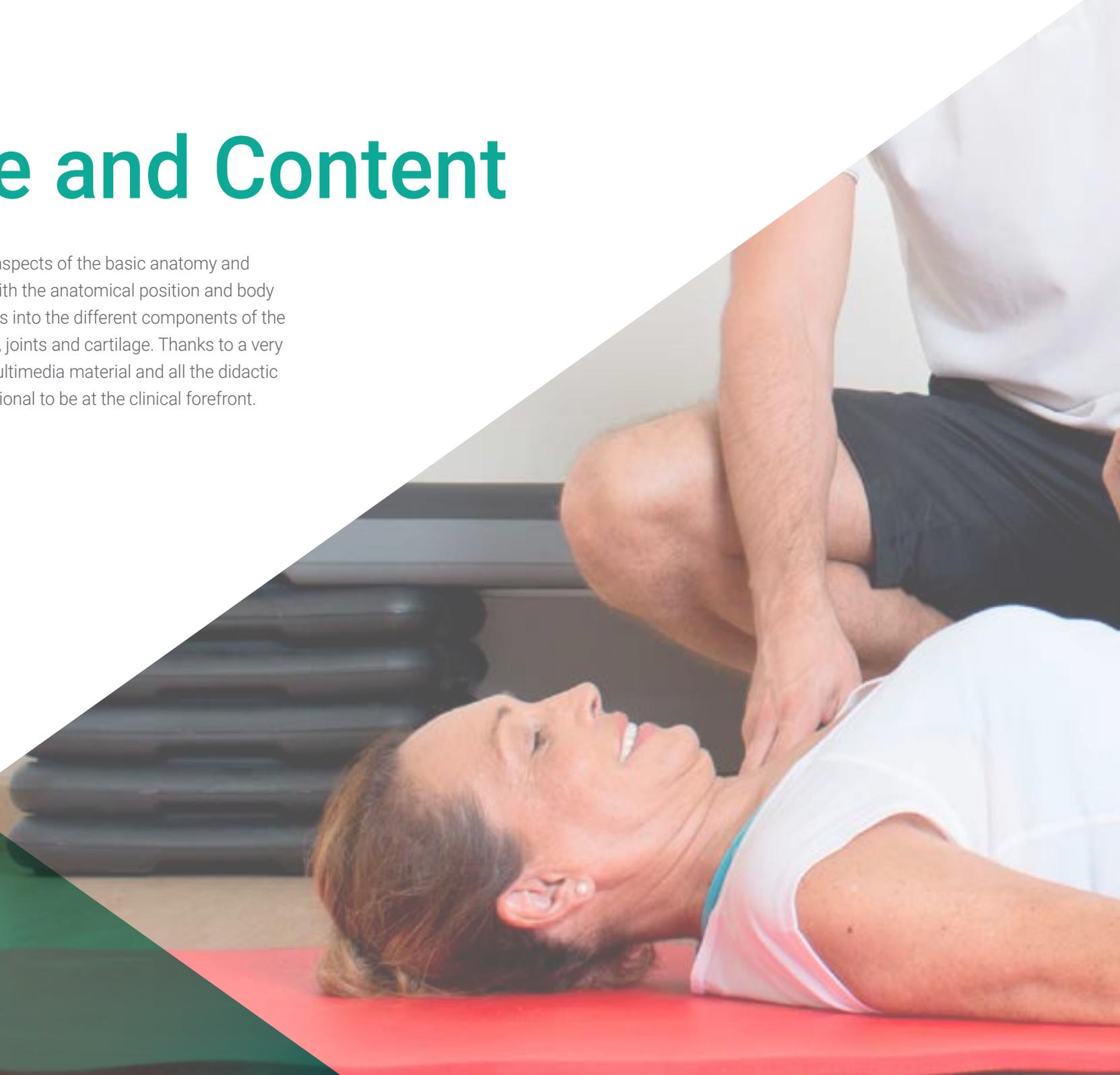
- Vice President of the Spanish Association of Therapeutic Yoga
- Founder of the *Air Core* method (classes that combine TRX and Functional Training with Yoga)
- Trainer in Therapeutic Yoga
- Degree in Biological Sciences from the Autonomous University of Madrid.
- Teacher Courses: Course in Progressive Ashtanga Yoga, FisiomYoga, Yoga Myofascial and Yoga and Cancer Teacher
- Pilates Floor Pilates Instructor Course
- Course in Phytotherapy and Nutrition
- Meditation Teacher Course



04

Structure and Content

The syllabus covers the most important aspects of the basic anatomy and physiology of the human body, starting with the anatomical position and body axes and anatomical planes. It then delves into the different components of the musculoskeletal system, including bones, joints and cartilage. Thanks to a very complete curriculum, with high quality multimedia material and all the didactic resources needed for the nursing professional to be at the clinical forefront.





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Download all the contents of this Postgraduate Certificate, such as specialized readings and multimedia material, even after you have finished the program"

Module 1. Structure of the 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 Plans
- 1.2. Bone
 - 1.2.1 Bone Anatomy of the Human Body
 - 1.2.2 Bone Structure and Function
 - 1.2.3 Different Types of Bones and their Relation 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 the Joints of the Human Body
 - 1.3.2 Different Types of Joints
 - 1.3.3 The Role of Joints in Posture and Movement
 - 1.3.4 Most Common Joint Injuries and How to Prevent them
- 1.4. Cartilage
 - 1.4.1 Anatomy and Physiology of the Cartilage of the Human Body
 - 1.4.2 Different Types of Cartilage and their Function in the Body
 - 1.4.3 The Role of Cartilage in Articulation and Mobility
 - 1.4.4 The Most Common Cartilage Injuries and their Prevention
- 1.5. Tendons and Ligaments
 - 1.5.1 Anatomy and Physiology of the Tendons and Ligaments of the Human Body
 - 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 Most Common Tendon and Ligament Injuries and How to Prevent them
- 1.6. Skeletal Muscle
 - 1.6.1 Anatomy and Physiology of the Musculoskeletal System of 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 the Practice of Therapeutic Yoga
 - 1.6.4 Most 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 the Practice of Therapeutic Yoga
 - 1.8.2 The Role of Bones in the Musculoskeletal System and their Relationship to Posture and Movement
 - 1.8.3 The Function of the Joints in the Musculoskeletal System and How to Take Care of them During the Practice of Therapeutic Yoga
 - 1.8.4 The Role of Fascia and Other Connective Tissues in the Musculoskeletal System and its Relationship to the Practice of Therapeutic Yoga
- 1.9. Nervous Control of Skeletal Muscles
 - 1.9.1 Anatomy and Physiology of the Nervous System and their Relationship to the Practice of Therapeutic Yoga
 - 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 the Practice of Therapeutic Yoga
 - 1.9.4 The Importance of Neuromuscular Control for Injury Prevention and Performance Enhancement in Therapeutic Yoga Practice
- 1.10. Muscle Contraction
 - 1.10.1 Anatomy and Physiology of Muscle Contraction and its Relation to the Practice of Therapeutic Yoga
 - 1.10.2 The Different Types of Muscle Contraction and its Application in the Practice of Therapeutic Yoga
 - 1.10.3 The Role of Neuromuscular Activation in Muscle Contraction and the and its Relationship to the Practice of Therapeutic Yoga
 - 1.10.4 The Importance of Stretching and Muscle Strengthening in Injury Prevention and Performance Enhancement in Therapeutic Yoga Practice

05

Methodology

This 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 Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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.

The nurse 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.



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 we have prepared more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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 really 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.



Nursing 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 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 them as many times as you want.



Interactive Summaries

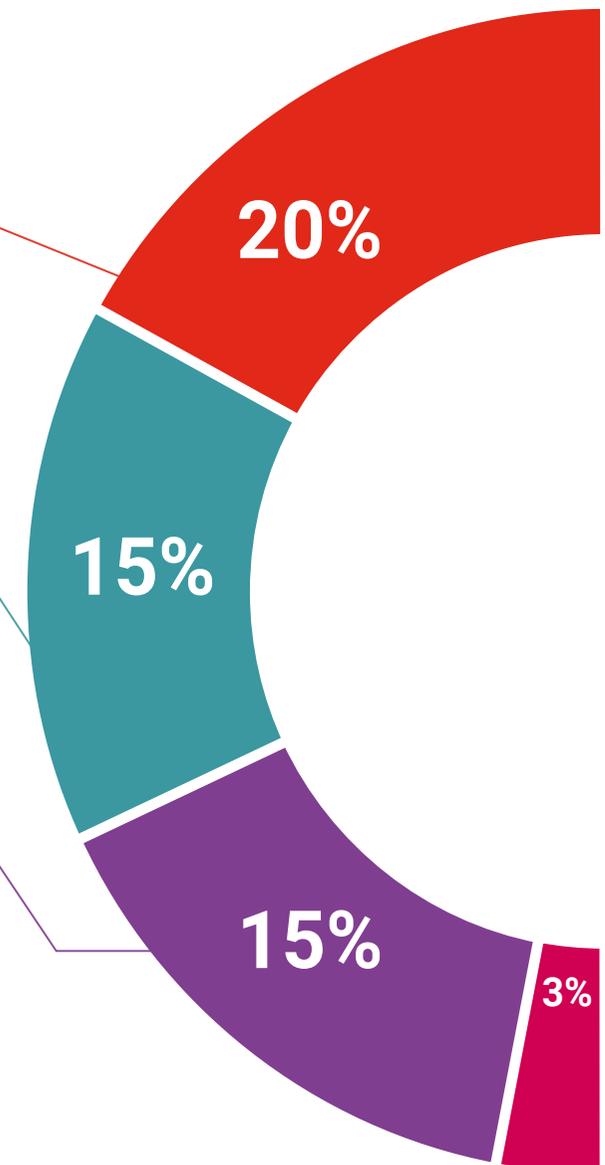
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

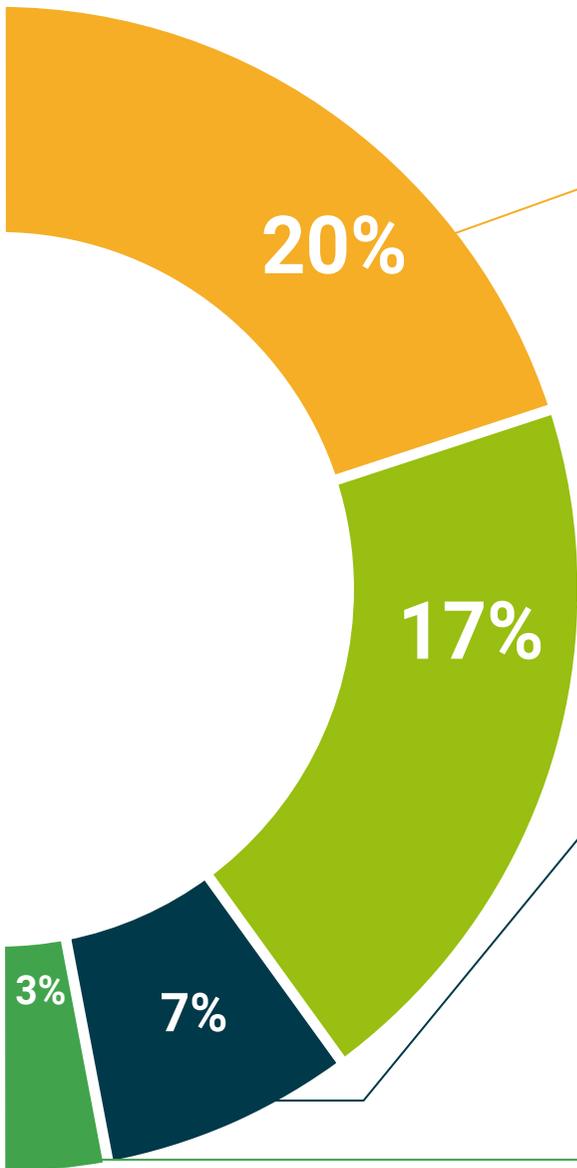
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their 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 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 Structure of the Locomotor System for Nursing, 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 a **Postgraduate Certificate in Structure of the Locomotor System for Nursing** 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 Structure of the Locomotor System for Nursing**

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.



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