# DOCTOR OF PHYSICAL THERAPY

Main Language of Instruction: French 𝔄 English O Arabic O

# Campus Where the Program Is Offered: CSM

# **OBJECTIVES**

This program aims to empower physiotherapists to advance the profession by providing care that is informed by treatment techniques supported by strong evidence related to patient outcomes. Graduates with the "Doctor of Physical Therapy" diploma will be qualified for administrative roles in physiotherapy units within hospitals and rehabilitation centers. Additionally, this program equips private physiotherapists with the skills needed for improved patient care and effective management of their clinics.

# PROGRAM LEARNING OUTCOMES (COMPETENCIES)

- Apply the principles of governance in physiotherapy and community health
- Ensure the quality of professional practice based on recommendations and scientific evidence
- Contribute scientifically and qualitatively to the evolution of practice, through research
- Develop strategies to adapt to a professional environment and continuously seek elements that promote optimal treatment
- Intervene in specific areas of physiotherapy
- Practice as an independent professional and exercise personal professional judgment

# ADMISSION REQUIREMENTS

Admission on file (Baccalaureate + 4) hold a Physiotherapy degree

# **COURSES/CREDITS GRANTED BY EQUIVALENCE**

17 elective credits will be granted by equivalence in the case of a prerequisite master's degree

# **PROGRAM REQUIREMENTS**

# 120 credits: Required courses (103 credits), Institution's elective courses (17 credits)

# Required Courses (103 credits)

Medical Imaging Screening (4 Cr.). Differential Diagnosis (4 Cr.). Physiotherapy Diagnosis (2 Cr.). Ultrasound and Diagnosis (3 Cr.). Ethics (2 Cr.). Biomedical Examination (4 Cr.). Implementation of Professional Recommendations in Physiotherapy (5 Cr.). Postural and Movement Biomechanics Applied to the Clinic (5 Cr.). Practice Based on convincing Scientific Evidence (5 Cr.). Management, Communication and Leadership (5 Cr.). Scientific Research Tools (4 Cr.). Pharmacology in Physiotherapy (5 Cr.). Prevention and Health Promotion (4 Cr.). Professional Project in DPT (30 Cr.). Psychology in Physiotherapy (4 Cr. Cr.). Quality in Physiotherapy (4 Cr.). Reasoning and Clinical Decision-Making (5 Cr.). Clinical Internship (8 Cr.)

# Institution's elective courses (to choose 17 credits)

Osteopathic Concept (2 Cr). Osteopathy of the Pelvic Girdle and Lower Limb (4 Cr). Embryology and Physiology of Fascia (2 Cr). Anatomy and Physiology of the Digestive/Endocrine/Genitourinary Systems (2 Cr). Semiology of Digestive/Endocrine/Genitourinary Systems (2 Cr). Osteopathy of the Lumbar Spine (4 Cr). Semiology of Nervous System Disorders (2 Cr). Physical Activities and Disability (2 Cr.). Physical Activities and Insufficiency of the Cardiovascular and Respiratory Systems (3 Cr.). Physical Activities and Nutrition (2 Cr.). Surgical Approach to Sports Injuries (1 Cr.). Tissue Biomechanics and Functional of the Musculoskeletal System (3 Cr.). Doping: Sports Practices and Controls (1 Cr.). Energetics of Physical Activity (4 Cr.). Maintenance of Posture and Gestures (4 Cr.).



Means and Tests of Clinical Explorations (3 Cr.). Physical Preparation (3 Cr.). Psychology of Sport and Physical Activity (1 Cr.). Rehabilitation of Athletes' Injuries (4 Cr.). Structures and Regulations in a Sporting Environment (1 Cr.). Manual Therapy Adapted to Athletes (4 Cr.)

# SUGGESTED STUDY PLAN

## Semester 1

Code	Course Name	Credits
039MCL2D1	Management, Communication and Leadership	5
039SOCRD2	Scientific Research Tools	4
039DOPHD2	Pharmacology in Physiotherapy	5
039DOQPD1	Quality in Physiotherapy	4
	Total	18

## Semester 2

Code	Course Name	Credits
039DDFED4	Differential Diagnosis	4
039DDPHD4	Diagnosis in Physiotherapy	2
039EDIAD4	Ultrasound and Diagnosis	3
039DOEBD2	Biomedical Examination	4
039PESPD4	Practice Based on Convincing Scientific Evidence	5
	Total	18

## Semester 3

Code	Course Name	Credits
039DSTAD3	Clinical Internship	8
	Total	8

# Semester 4

Code	Course Name	Credits
	Elective Courses	17
	Total	17

# Semester 5

Code	Course Name	Credits
039DOIMD2	Medical Imaging Screening	4
039ETHID4	Ethics	2
039DOMPD1	Prevention and Health Promotion	4
039RCPDD4	Reasoning and Clinical Decision Making	5
039PSPHD1	Psychology in Physiotherapy	4
	Total	19



## Semester 6

Code	Course Name	Credits
039PROJD6	Professional Project in DPT	30
	Total	30

## Semester 7

Code	Course Name	Credits
039BPMAD1	Postural and Movement Biomechanics Applied to the Clinic	5
039IMRPD4	Implementation of Professional Recommendations in Physiotherapy	5
	Total	10

# **COURSE DESCRIPTION**

#### **Physical Activities and Disability** 039ACPAM4 2 Cr.

This course provides students with the necessary knowledge for adapting physical activities for disabled individuals.

### 039APIAM4 Physical Activities and Insufficiency of the Cardiovascular and Respiratory Systems 3 Cr.

This course allows students to adapt physical rehabilitation activities specific to the pathologies of the cardiovascular and respiratory systems.

#### 039ACPNM4 **Physical Activities and Nutrition**

This course allows students to deepen their understanding of the fundamental concepts of sports nutrition and acquire nutritional knowledge tailored to several factors: the type of physical activity practiced (aerobic, anaerobic), the nature of the sport, the sports season.

#### 039ADEGM2 Anatomy and Physiology of the Digestive/Endocrine/Genitourinary Systems 2 Cr.

This course allows students to explore in detail the structure and function of essential body systems. It covers the anatomy and physiology of the digestive, urinary, genital, endocrine and reproductive systems.

#### Surgical Approach to Sports Injuries 039APCHM3

This course allows students to acquire knowledge about the different sports-related pathologies that require surgical treatment and to understand the primary surgical interventions in the sports field and their physiotherapeutic consequences.

#### 039BTAFM3 **Tissue and Functional Biomechanics of the Musculoskeletal System**

This course allows students to acquire an in-depth knowledge of the basic principles of the biomechanics of sports movements, aiming to better assess the risks of injuries.

#### 039COOSM1 **Osteopathic Concept**

This course offers students essential knowledge in the main areas of osteopathic concepts, preparing them for clinical tests and direct and indirect osteopathic joint or tissue techniques.

#### 039DOIMD2 Medical Imaging Screening

This course enables students to interpret clinical information from various medical imaging techniques and become familiar with different imaging modalities. Students will acquire the imaging knowledge necessary for clinical and practical decision-making.

#### 039DDFED4 **Differential Diagnosis**

This course equips students with the knowledge and skills to screen patients effectively. Differential diagnosis is introduced by comparing the signs and symptoms of various body systems.

# 4 Cr.

# 1 Cr.

2 Cr.

### 3 Cr.

# 2 Cr.

### 039DDPHD4 **Diagnosis in Physiotherapy**

This course equips students with the medical knowledge and skills needed to establish a diagnosis in physiotherapy.

### 039DPSCM4 **Doping: Sporting Practices and Controls**

This course provides students with basic knowledge of doping methods and substances.

### 039EDIAD4 **Ultrasound and Diagnosis**

This course is based on the recommendations of The Royal College of Radiologists, and the European Federation of Societies for Ultrasound in Medicine and Biology, as well as a scientific literature on the use of ultrasound for the trunk region in rehabilitation.

### 039EPFAM2 **Embryology and Fascia Physiology**

This course allows students to acquire the main concepts on the development of the human embryo and gene expression, which are basic elements for understanding the functioning of the fascial system. By the end of this course, students will be able to palpate myofacial structures.

### 039EACPM3 **Energetics of Physical Activity**

This course aims to deepen students' knowledge of basal and exercise metabolism in humans and to introduce them to the design of training programs.

### Maintenance of Posture and Gestures 039ENPGM4

This course allows students to gain the neuroanatomological and physiological knowledge necessary for a better understanding of postural control. Subsequently, they will be able to apply this knowledge to different sporting activities.

#### 039ETHID4 Ethics

This course examines how advancements in medical sciences, particularly their application in physiotherapy, challenge practitioners' responsibilities in both their fundamental approach to patients and their professional actions. As physiotherapists face numerous ethical questions—ranging from straightforward to complex—this training provides rational and operational tools to guide practitioners in discernment and decision-making.

#### 039DOEBD2 **Biomedical Examination**

This course examines the role and usefulness of biological examinations in clinical decision-making. It covers when and why to request these exams, and includes analysis of variations in patient results.

### 039IMRPD4 Implementation of Professional Recommendations in Physiotherapy

By the end of this course students will be able to understand the importance of producing and applying professional recommendations through effective analysis of barriers and facilitators.

### 039BPMAD1 Postural and Movement Biomechanics Applied to the Clinic

This course helps students understand human movement through kinematic and kinetic analysis, and master the biomechanics of the major functions of the musculoskeletal system, in particular standing and walking. Students will subsequently be able to differentiate between primary problems and compensatory mechanisms and draw clinical conclusions in pathological cases.

039PESPD4 Practice Based on Convincing Scientific Evidence	5 Cr.
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This course is essential for enabling physiotherapists to practice based on evidence. It fosters autonomy, equipping them to address practical questions encountered with patients. They will stay informed about new developments in their field and develop a critical perspective on the quality of scientific information presented.

# 4 Cr.

# 5 Cr.

5 Cr.

# 2 Cr.

# 3 Cr.

1 Cr.

2 Cr.

# 2 Cr.

4 Cr.

#### 039MCLED1 Management, Communication and Leadership

This course enables students to apply management principles in physiotherapy. It provides essential knowledge about the characteristics of effective leadership, communication, and the management and resolution of workplace problems and conflicts. Additionally, it clarifies the role of these concepts in the practice of physiotherapists.

#### Means and Tests of Clinical Explorations 039MTECM3

This course allows students to broaden their knowledge of the methods and means of clinical exploration in the different areas of sport and physical activity. In addition, it introduces the different measuring instruments and their use in clinical explorations.

# 039OCPIM1 Osteopathy of the Pelvic Girdle and Lower Limb

This course allows students, following specific questioning, to implement specific osteopathic tests to develop an adequate osteopathic diagnosis of the pelvic girdle and the lower limb. Subsequently, students will acquire the knowledge and manual skill necessary to choose and adapt the osteopathic techniques to be used. They will also be able to know the indications and contraindications of the techniques as well as their limits.

### 039OSCLM2 Osteopathy of the Lumbar Spine

This course allows students, following specific questioning, to implement specific osteopathic tests to develop an adequate osteopathic diagnosis of the lumbar spine. It equips them with the knowledge and manual skills necessary to choose and adapt the osteopathic techniques to use. They will also be able to understand the indications and contraindications of the techniques as well as their limits.

### 039SOCRD2 **Scientific Research Tools**

This course offers students the opportunity to validate their research by relying on solid foundations. The different laws of biostatistics and epidemiology will be studied, as well as the different methods that must be used to evaluate a conclusion or hypothesis.

#### 039DOPHD2 Pharmacology in Physiotherapy

This course provides practitioners with the rational pharmacological bases of drug therapy.

### 039PRPPM3 **Physical Preparation**

This course allows students to master general and specific physical preparation techniques relating to individual and team sports.

### **Prevention and Health Promotion** 039DOMPD1

This course allows students to acquire the basic concepts and essential elements of health management and promotion. It enables them to assimilate the principles of prevention and risk reduction strategies, as well as programs intended for special populations. Additionally, students will identify the role of the physiotherapist in the field of prevention and health promotion.

#### 039PROJD6 **Professional Project in DPT**

The professional project is an individual work presented at the end of the DPT program. Students choose their subjects, and the development of the project is guided by a supervisor. The project covers different dimensions acquired during training (clinical reasoning, conclusive evidence, differential diagnosis, diagnosis in physiotherapy, pharmacology, epidemiology, decision-making in physiotherapy, etc.).

### 039PSAPM3 **Psychology of Sport and Physical Activity**

By the end of this course, students will learn how psychological factors affect individual physical performance. They will understand how participation in sports and physical activity influences psychological development, health, and well-being, as well as how to accelerate rehabilitation processes.

# 4 Cr.

# 5 Cr.

# 30 Cr.

# 1 Cr.

# 4 Cr.

5 Cr.

3 Cr.

4 Cr.

# 3 Cr.

### 039PSPHD1 **Psychology in Physiotherapy**

This course covers the main concepts of psychology, focusing on both intrapersonal and interpersonal aspects. It explores the physiotherapist-patient relationship in relation to various personalities, characteristics, and deficiencies (sensory, intellectual, and motor). Case studies are presented to enhance understanding of the different issues involved.

#### 039DOOPD1 Quality in Physiotherapy

By the end of this course, students will have the necessary knowledge about the "Quality approach". They will be able to address the different concepts, methods, quality tools and apply them to solve problems in real-life situations and daily scientific practices. Students will also master general quality standards, such as ISO.

#### 039RCPDD4 Reasoning and clinical decision-making

Students will be able to identify sources of information and evidence to enhance short-term and long-term clinical decision-making. They will also learn to analyze the barriers and facilitators that impact these clinical decisions.

#### 039REASM3 **Rehabilitation of Athletes' Injuries**

This course deepens students' understanding of high-level sports and the unique pathologies affecting elite athletes. They will learn to manage the athlete's medical logbook and apply specialized rehabilitation techniques tailored to the needs of top-tier athletes.

#### 039SASNM2 Semiology of Nervous System Disorders

This course allows students to understand the semiology of the main disorders of the nervous system, subsequently enabling them to make a differential diagnosis to their patients and to be recognize warning signs in neurology.

#### 039SDEGM2 Semiology of the Digestive/Endocrine/Genitourinary Systems

At the end of this course, students become familiar with the main warning signs and syndromes associated with disorders of the digestive and endocrine systems. They learn to recognize important clinical manifestations and establish appropriate and functional diagnoses, while distinguishing between similar conditions. In addition, the course emphasizes the understanding of surgical interventions and their impact on osteopathic care.

#### **Clinical Internship** 039DSTAD3

As part of the DPT program, this internship complements the two courses previously completed: "Management, Communication and Leadership" and "Quality in Physiotherapy."

The internship focuses on administrative aspects reflecting different dimensions: quality in physiotherapy, communication in physiotherapy centers or services, management, planning, conflict resolution, and decisionmaking.

#### 039SRMSM4 Structures and Regulations in Sports

This course familiarizes students with the organizations governing sports competitions and the regulations for organizing national, regional and international competitions.

#### 039TMASM3 Manual Therapy Adapted to Athletes

This course enables students to approach manual therapy within the sports field through a comprehensive, holistic perspective.



4 Cr.

4 Cr.

2 cr.

2 Cr.

8 Cr.

5 Cr.

1 Cr.