

**COURSE DATA****DATA SUBJECT**

**Code:** 33019  
**Name:** Physiotherapy of the locomotor system  
**Cycle:** Undergraduate Studies  
**ECTS Credits:** 6  
**Academic year:** 2025-26

**STUDY (S)**

Degree	Center	Acad. year	Period
1202 - Degree in Physiotherapy	Facultat de Fisioteràpia	3	First quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1202 - Degree in Physiotherapy	Specific intervention methods in physiotherapy	COMPULSORY

**COORDINATION**

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**SUMMARY**

The course Physiotherapy of the locomotor system will guide the student to a field of musculoskeletal physiotherapy. The student will learn to evaluate and treat different musculoskeletal conditions.

**PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

**OTHER REQUIREMENTS**

It is not necessary previous requirements.

**COMPETENCES / LEARNING OUTCOMES**

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Acquire knowledge related to the information and communication technologies.

Acquire sensitivity to environmental issues.

Have the ability to organise and plan work.

Know how to apply specific techniques that consider the implications of orthopaedics in physiotherapy, therapeutic reflex techniques, as well as other alternative and/or complementary methodologies and techniques with approved safety and effectiveness according to the state of development of science.

Know how to apply the different physiotherapy techniques for the promotion, prevention and health preservation in the pathologies of the locomotor, respiratory, cardiovascular and nervous systems. Know how to apply manual techniques, manipulative therapy, osteopathy and chiropractic techniques.

Know how to assess the results of the physiotherapy treatment.

Know how to establish a therapeutic plan to reach the proposed goals.

Know how to evaluate the physiotherapy treatment applied.

Know how to plan treatment goals in the different pathologies of the locomotor, respiratory, cardiovascular and nervous systems from the data of the Physiotherapy Clinical Records.

Recognise diversity, multiculturalism, democratic values and peace culture.

Respect fundamental rights and equality between men and women.

Work in teams.

## DESCRIPTION OF CONTENTS

### **1. Physiotherapy of the immobility, osseous, articular, muscle, tendon, ligament and cutaneous conditions (theoretical program)**

Class 1. Physiotherapeutic approach on bone, joint, muscle, tendon and cutaneous injuries. Immobilization, stiffness, and ankylosis. Introduction to clinical reasoning.

Class 2. Physiotherapeutic approach on bone, joint, muscle, tendon and cutaneous injuries. Trigger points and neuromuscular bandage.

### **2. Physiotherapy on the upper extremity pathology (theoretical program)**

Class 3. Physiotherapy of the shoulder and shoulder girdle (I). Shoulder, clavicle and shoulder blade fractures.

Class 4. Physiotherapy of the shoulder and shoulder girdle (II). Shoulder instability. Impingement



syndrome.

Class 5. Physiotherapy of the shoulder and shoulder girdle (III). Capsulitis and frozen shoulder. Shoulder surgery.

Class 6. Physiotherapy of the elbow. Elbow fractures and luxations. Elbow instability. Forearm fractures. Tendinitis. Elbow surgery.

Class 7. Physiotherapy of hand and wrist (I). Hand and wrist fractures and instabilities. Hand surgery.

Class 8. Physiotherapy of hand and wrist (II). Tendon pathology.

### 3. Physiotherapy on the lower extremity pathology (theoretical program)

Class 9. Physiotherapy of the hip (I). Hip fractures. Surgery of the hip.

Class 10. Physiotherapy of the hip (II). Bursitis. Gait pathology.

Class 11. Physiotherapy of the knee (I). Knee fractures. Pathology of the meniscus.

Class 12. Physiotherapy of the knee (II). Pathology of the knee extensor system. Tendinopathy. Knee surgery.

Class 13. Physiotherapy of the ankle (I). Fractures and luxation.

Class 14. Physiotherapy of the ankle (II). Pathology of the ligaments. Tendinopathy.

Class 15. Physiotherapy of the foot. Fractures. Pathology of the ligaments. Tendinopathy.

### 4. Physiotherapy on the back and cranium (theoretical program)

Class 17. Physiotherapy of the cervical spine. Fractures and luxation without neurological complications. Muscle, capsular and ligament injuries. Cervical primary pain.

Class 18. Physiotherapy of the thoracic spine. Thoracic pain.

Class 19. Physiotherapy of the lumbar spine. Unspecific Low back pain.

Class 20. Physiotherapy in the pelvis and sacrum. Pubalgia. Sacralgia.

### 5. Practical program

Practice 1.- Physiotherapy of the shoulder.

Practice 2.- Physiotherapy of the elbow.

Practice 3.- Physiotherapy of the hand and wrist.

Practice 4.- Physiotherapy of the hip.

Practice 5.- Physiotherapy of the knee.

Practice 6.- Physiotherapy of the ankle and foot.

Practice 7.- Physiotherapy of the temporomandibular dysfunction (DTM).

Practice 8.- Physiotherapy of the cervical spine.

Practice 9.- Physiotherapy of the thoracic spine.

Practice 10. Physiotherapy of the lumbar and sacroiliac spine.

## WORKLOAD



**PRESENCIAL ACTIVITIES**

Activity	Hours
Theory	20,00
Laboratory	40,00
<b>Total hours</b>	<b>60,00</b>

**NON PRESENCIAL ACTIVITIES**

Activity	Hours
Attendance at other activities	0,00
Individual or group project	30,00
Independent study and work	0,00
Preparation of lessons	30,00
Preparation for assessment activities	30,00
Resolution of case studies	0,00
<b>Total hours</b>	<b>90,00</b>

**TEACHING METHODOLOGY**

The theoretical teaching will take place in the classroom with exposure of topics in master classes, participating activities and case studies.

In the practical program, students will learn by solving problems and exercises, group activities and case studies, and they will train in musculoskeletal physical therapy skills and procedures.

The student will submit a practice report.

The teaching program might be modified during the development of the subject if the professor considers it appropriate, in order to guarantee the teaching quality and the learning process.

**EVALUATION**

**Theoretical program (40% of the final mark)**

1. Written test: a) Multiple-choice test of 20 questions (20%).  $Score = [hits - (errors/n^{\circ} options - 1)] * (maximal\ score / number\ of\ questions)$ ; b) 2 short questions of development (20%).

**Practical program (60% of the final mark)**

1. Oral examination (50%). Simulation of the techniques exposed in the practices and resolution of practical cases.

2. Self study (10%). Presentation of practice report.



The total course grade in each call will be the sum of the marks obtained in the theoretical block and the marks obtained in the practical block. The final score for the subject will be averaged provided that the student has obtained at least 5 of 10 in each of these parts: written test, oral examination and practice report.

## REFERENCES

### Basic

- Boger GW, Hopp R, Roller F. *Fisioterapia para Ortopedia y Reumatología*. Barcelona: Paidotribo; 2000.
- Haaner-Becker R, Schoer D. *Manual de técnicas de fisioterapia. Aplicación en traumatología y ortopedia*. Barcelona: Paidotribo; 2001.
- Hall CM, Brody LT. *Ejercicio terapéutico. Recuperación funcional*. Barcelona: Paidotribo; 2006.
- Hoppenfeld S. *Exploración física de la columna vertebral y las extremidades*. México: Manual Moderno; 1979.
- Kapandji A I. *Fisiología articular*. París: Médica Panamericana; 1998.

### Additional

- Enciclopedia Médico-Quirúrgica. Tratado de Kinesiterapia-Medicina Física. Tomos 1-2-3-4- Praxis Médica S. A. Madrid. 1995.*
- Greenman P. *Principios y práctica de la medicina manual*. Buenos Aires: Médica Panamericana; 1998.
- Simons and Travell. *Dolor y disfunción miofascial Vol I y II*. Ed. Médica Panamericana, 2002.
- Jull G, Moore A, Falla D, Lewis J, McCarthy C, Sterling M. *Grievez's Modern musculoskeletal physiotherapy (4th edition)*. Elsevier 2015.

Likewise, each topic will specify the books, scientific articles, and readings of interest recommended for preparing the content covered.