



## COURSE DATA

| Data Subject         |   |
|----------------------|---|
| <b>Code</b>          | 44642   |
| <b>Name</b>          | Methodology and approach for the treatment of injuries and dysfunctions |
| <b>Cycle</b>         | Master's degree   |
| <b>ECTS Credits</b>  | 6.0   |
| <b>Academic year</b> | 2022 - 2023   |

### Study (s)

| Degree  | Center                   | Acad. Period<br>year |
|---|--------------------------|----------------------|
| 2220 - M.U. en Recuperación Funcional en Fisioterapia | Faculty of Physiotherapy | 1 First term         |

### Subject-matter

| Degree  | Subject-matter   | Character |
|---|--|-----------|
| 2220 - M.U. en Recuperación Funcional en Fisioterapia | 11 - Methodology and approach for the treatment of injuries and dysfunctions | Optional  |

### Coordination

| Name                    | Department          |
|-------------------------|---------------------|
| BALASCH I BERNAT, MERCE | 191 - Physiotherapy |

## SUMMARY

The subject includes the assessment of both overall and specific dysfunctions of the musculoskeletal system, and the study of different tools to make a correct clinical examination and to adapt the therapeutic approach related to functional recovery.

It also includes the study of different treatment strategies and targets for different locomotor dysfunctions.

## PREVIOUS KNOWLEDGE



### **Relationship to other subjects of the same degree**

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

### **Other requirements**

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

## **OUTCOMES**

### **2220 - M.U. en Recuperación Funcional en Fisioterapia**

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should demonstrate self-directed learning skills for continued academic growth.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Ser capaces de obtener y de seleccionar la información específica y las fuentes relevantes para la resolución de problemas, elaboración de estrategias y planes de actuación, asesoramiento y ejecución de las diferentes actuaciones fisioterápicas en los ámbitos de la recuperación funcional.
- Saber aplicar los conocimientos adquiridos y ser capaces de resolver problemas en entornos nuevos, o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con las técnicas fisioterápicas en los distintos niveles de asistencia sanitaria en el tratamiento físico de las patologías y lesiones concretas cuyo nivel de especialización requerido es mayor.
- Ser capaz de elaborar informes orales y escritos acerca de la situación funcional de las/os pacientes.
- Profundizar en la fisiopatología de las lesiones y enfermedades más frecuentes.
- Profundizar en los distintos métodos y sistemas de valoración clínica en recuperación Funcional.
- Ser capaces de aplicar correctamente las diferentes metodologías disponibles basadas en la evidencia en el tratamiento de las patologías y lesiones que nos ocupa.
- Ser capaces de dar a conocer a los pacientes la importancia que la salud y los estilos de vida saludable tienen en la prevención primaria y secundaria así como en la mejora de las diferentes patologías y lesiones concretas.
- Ahondar en el tratamiento de fisioterapia específico según las características de la patología.



## LEARNING OUTCOMES

At the end of the subject, students will be able to give a structured approach to physiotherapy treatment, and to apply the methodology to be followed in the different diseases and disorders of the musculoskeletal system likely to receive physiotherapy treatment.

## DESCRIPTION OF CONTENTS

### 1. PHYSICAL THERAPY IN MUSCULOSKELETAL DISORDERS

1. Assessment of the dysfunctions of the musculoskeletal system (cranial, cervical, thoracic, lumbar, sacral and limbs).
2. Treatment strategies: structural and functional techniques.
3. Design and implementation of various modalities of physical therapy and exercise therapy procedures, mobilization, manipulation, massage therapy, manual therapy, structural and functional osteopathic physiotherapy and other manual techniques.

## WORKLOAD

| ACTIVITY                   | Hours         | % To be attended |
|----------------------------|---------------|------------------|
| Laboratory practices       | 24,00         | 100              |
| Theory classes             | 12,00         | 100              |
| Study and independent work | 114,00        | 0                |
| <b>TOTAL</b>               | <b>150,00</b> |                  |

## TEACHING METHODOLOGY

Theoretical-practical face-to-face lessons in which the contents of the subjects will be worked on, discussed and carried out using different teaching resources.

The individual and collective tutorials should be used as a way to coordinate the students in the individual and tasks in groups.

## EVALUATION

|  |     |
|--|-----|
| Individual work consisting of a literature search work on a subject taught in class, a work about clinical case, activities about case resolution, or a critical work. This will consist of a written part and an oral presentation (80% y 20%, respectively). | 20% |
|--|-----|



|   |            |
|---|------------|
| Attendance and participation in class, involving the student in the classes. student interaction on questions posed by the teacher, and the participation of relevant discussions on the information given in class and participation in activities that promote classroom dynamics taken into account. | <b>50%</b> |
| Theoretical and practical final test that integrates the knowledge acquired during the course, both with respect to conceptual or procedural content. The examination may be written or oral.   | <b>30%</b> |

The final mark of the subject will be the weighted sum of the marks obtained in each evaluation test, as long as the student has obtained at least 50% of the maximum mark in each of the tests: individual work, attendance and participation in class and final test (exam). Likewise, with respect to individual work, it will be necessary for the student to pass both parts (written and oral) in order to average with the rest of the tests.

## REFERENCES

### Basic

- 1. Clinical Reasoning in Musculoskeletal Practice. ISBN-13: 978-0702059766
- 2. Torres-Cueco R. 2008 La Columna Cervical: Síndromes Clínicos y su Tratamiento Manipulativo. Madrid: Ed. Panamericana
- 3. Simons DG, Travell JG, Simons LS. Dolor y disfunción miofascial. El manual de los puntos gatillo. Mitad superior del cuerpo. 2<sup>a</sup> ed. Madrid: Editorial Médica Panamericana; 2002
- 4. Moseley GL. 2013 A pain neuromatrix approach to patients with chronic pain. Man Ther
- 5. Zamorano E. 2013 Movilización NM. Tratamiento de los trastornos mecanosensitivos del sistema nervioso. Ed. Médica Panamericana 13-36
- 6. Butler, D. S., & Moseley, G. L. (2010). Explicando el dolor. Noigroup Publications
- 7. Sahrmann, S. (2006). Diagnóstico y tratamiento de las alteraciones de movimiento (Vol. 88). Editorial Paidotribo.
- 8. Bahr, R., & Maehlum, S. (2007). Lesiones deportivas: diagnóstico, tratamiento y rehabilitación. Ed. Médica Panamericana.

### Additional

- 1. World Confederation for Physical Therapy. WCPT guideline for physical therapist profesional entry level education. London, UK: WCPT; 2018
- 2. Gifford L. (2014). Aches and pains. CNS Press.
- 3. Butler DS. (2000). The sensitive nervous system. Noigroup publications
- 3. Albert HB, Manniche C. The efficacy of systematic active conservative treatment for patients with severe sciatica: a single-blind, randomized, clinical, controlled trial. Spine (Phila Pa 1976). 2012 Apr 1;37(7):531-42.
- 4. Sizer PS, Brismee JM, Cook K. Medical screening for red flags in the diagnosis and management of



muskuloskeletal spine pain. Pain Pract. 2011;7(1):53-71

5. Evans DW, Ost BS. 2002 Mechanism and effects of spinal high-velocity, low-amplitude thrust manipulation. J Manipulative Physical Ther 25:251-62

6. Barra ME, Lopez C, Fernández G, Raya L, Lucha MO, Tricás JM. Effectiveness of Diacutaneous Fibrolysis for the treatment of subacromial impingement syndrome: A randomised controlled trial. Manual Therapy. 2013;18(5):418-24.

