COURSE DATA

DATA SUBJECT

Code: 44642
Name: Methodology and approach for the treatment of injuries and dysfunctions
Cycle: Master's Degree
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2220 - Master's Degree in Functional Recovery in Physiotherapy	Facultat de Fisioteràpia	1	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2220 - Master's Degree in Functional Recovery in Physiotherapy	Methodology and approach for the treatment of injuries and dysfunctions	ELECTIVES

COORDINATION

BALASCH I BERNAT MERCÈ

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.

COMPETENCES / LEARNING OUTCOMES

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Apply acquired knowledge and develop the ability to solve problems in new or unfamiliar environments within broader or multidisciplinary contexts related to physiotherapy techniques across different levels of healthcare, specifically in the physical treatment of complex pathologies and injuries requiring a higher level of specialization.

Be able to correctly apply the various evidence-based methodologies available in the treatment of the pathologies and injuries in question

Being able to obtain and select specific information and relevant sources for problem-solving, strategy development and action plans, advising and implementing different physiotherapy interventions in the areas of functional recovery.

Deepening Knowledge of Clinical Assessment Methods and Systems in Functional Recovery

Delve into specific physiotherapy treatment approaches tailored to the unique characteristics of each pathology.

Develop the ability to effectively communicate to patients the importance of health and healthy lifestyles in primary and secondary prevention, as well as in improving specific pathologies and injuries.

Develop the ability to prepare and deliver both oral and written reports on the functional status of patients

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.

To delve deeper into the pathophysiology of the most common injuries and diseases.

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

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	12,00
Laboratory	24,00
Total hours	**36,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	114,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	**114,00**

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.	**50%**
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.	**30%**

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.

Class attendance is compulsory and is part of the course evaluation. In this sense, a minimum attendance of 80% of the course hours is required to receive the highest grade in this evaluation category. Likewise, except for reasons of force majeure accredited to the master's degree management, a mínimum attendance of 50% of the course hours is required to pass this part of the evaluation. Because face-to-face classes are non-recoverable, failing to attend 50% of the hours of the subject means it is impossible to pass the subject in either of the two calls.

REFERENCES

BASIC:

- Heick J, Lázaro RT. *Goodman and Snyder's Differential Diagnosis for Physical Therapists*. 7th ed. Editorial Elservier. 2022. ISBN 9780323722049.
- McMahon SB, Koltzenburg M, Tracey I, Turk DC. *Wall & Melzack's Textbook of Pain*. Elsevier Health Sciences; 2013. ISBN: 9780702044636.
- Moseley GL, Butler DS. *Explain Pain Supercharged: The Clinician's Manual*. Noigroup Publications; 2017. ISBN: 9780994350227.
- Waddell G. *The Back Pain Revolution*. 2nd ed. Edinburgh: Churchill Livingstone; 2004. ISBN: 9780443072464.

COMPLEMENTARY:

- Bialosky JE, Beneciuk JM, Bishop MD, Coronado RA, Penza CW, Simon CB, et al. Unraveling the mechanisms of manual therapy: Modeling an approach. *J Orthop Sports Phys Ther.* 2018 Jan;48 (1):8-18. doi:10.2519/jospt.2018.7476.
- Bracilovic A, Nihal A, Houston VL, Beattie AC, Rosenberg ZS, Trepman E. Effect of Foot and Ankle Position on Tarsal Tunnel Compartment Volume. *Foot Ankle Int*. 2006 Jun;27(6):431-7. doi: 10.1177/107110070602700608.
- Carro LP, Fernández Hernando M, Cerezal L, Saenz Navarro I, Alfonso Fernandez A, Ortiz Castillo A. Deep Gluteal Space Problems: Piriformis Syndrome, Ischiofemoral Impingement and Sciatic Nerve Release. *Muscles Ligaments Tendons J.* 2016 Jul;6(3):384-96. doi:10.11138/mltj/2016. 6.3.384.
- Cooper G, Bailey B, Bogduk N. Cervical zygapophysial joint pain maps. *Pain Med*. 2007;8(4):344-53. doi:10.1111/j.1526-4637.2006.00201.x.
- Fukui S, Ohseto K, Shiotani M, Ohno K, Karasawa H, Naganuma Y, et al. Referred pain distribution of the cervical zygapophyseal joints and cervical dorsal rami. *Pain*. 1996 Nov;68(1):79-83. doi: 10.1016/S0304-3959(96)03173-9.
- Lin I, Wiles L, Waller R, Goucke R, Nagree Y, Gibberd M, et al. What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review. *Br J Sports Med*. 2020 Jan;54(2):79-86. doi:10.1136 /bjsports-2017-098983.
- Martin HD, Reddy M, Gomez-Hoyos J. Deep Gluteal Syndrome. *J Hip Preserv Surg*. 2015 Jun;2(2): 99-107. doi:10.1093/jhps/hnv029.
- McSweeney SC, Cichero M. Tarsal Tunnel Syndrome—A Narrative Literature Review. *Foot (Edinb).* 2015 Dec;25(4):244-50. doi:10.1016/j.foot.2015.08.008.
- Schmid AB, Fundaun J, Tampin B. Entrapment Neuropathies: A Contemporary Approach to Pathophysiology, Clinical Assessment, and Management. *PAIN Reports.* 2020 Jul;5(4):e829. doi: 10.1097/PR9.0000000000000829.
- Skirven R, Osterman AL, Fedorczyk JM. *Rehabilitation of the Hand and Upper Extremity.* 2-Volume Set. Elsevier; 2020. ISBN: 9780323446560.
- Such S. Razonamiento clínico y valoración en fisioterapia. En: *Abordaje del dolor en fisioterapia. Fundamentos y técnicas.* 1a ed. Madrid: Editorial Médica Panamericana; 2022. p. 379-93. ISBN: 9788491106578.
- Torres-Cueco R. *Essential Guide to the Cervical Spine - Volume Two: Clinical Syndromes and Manipulative Treatment. Vol 2.* 1st ed. Editorial Elservier; 2017. ISBN: 9780702046100.

Likewise, the books, scientific articles and readings of interest recommended for the preparation of the contents addressed in each topic will be specified at the end of each class.