

Clinical Assessment in Physiotherapy of the Locomotor System

Code: 102985
ECTS Credits: 6

Degree	Type	Year	Semester
2500892 Physiotherapy	OB	2	1

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Teachers

Carlos Lopez Perez

Berta Paula Magallares López

Patricia Moya Alvarado

Prerequisites

It is necessary that the student has acquired the knowledge and basic competences of the subjects of Human Anatomy and Biomechanics, taught in first.

It is also convenient to have acquired the knowledge and basic competences in the subject of Human Psychology.

Objectives and Contextualisation

The general objectives of the subject include the evaluation of the locomotor system from the clinical data obtained from the anamnesis, inspection and physical examination, based on the definition of normality or abnormality parameters, which allow to elaborate a first diagnostic approach and a therapeutic orientation.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.

- Analyse and synthesise.
- Apply quality-assurance mechanisms in physiotherapy practice, in accordance with the recognised and validated criteria.
- Design the physiotherapy intervention plan in accordance with the criteria of appropriateness, validity and efficiency.
- Display critical reasoning skills.
- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Display knowledge of the physiotherapy methods, procedures and interventions in clinical therapeutics.
- Evaluate the functional state of the patient, considering the physical, psychological and social aspects.
- Express ideas fluently, coherently and correctly, both orally and in writing.
- Integrate, through clinical experience, the ethical and professional values, knowledge, skills and attitudes of physiotherapy, in order to resolve specific clinical cases in the hospital and non-hospital environments, and primary and community care.
- Make a physiotherapy diagnosis applying internationally recognised norms and validation instruments.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Make the most correct decisions in given situations.
- Organise and plan.
- Participate in drawing up physiotherapy protocols on the basis of scientific evidence, and promote professional activities that facilitate physiotherapy research.
- Solve problems.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Analyse and synthesise.
3. Apply physiotherapy methods, procedures and interventions in the different clinical specialisations that treat conditions of the musculoskeletal system.
4. Apply specific physiotherapy methods to promote a healthy lifestyle, in relation to the musculoskeletal system, through health education.
5. Communicate using language that is not sexist.
6. Consider how gender stereotypes and roles impinge on the exercise of the profession.
7. Critically analyse the principles, values and procedures that govern the exercise of the profession.
8. Define general and specific objectives when using physiotherapy treatment for disorders of the musculoskeletal system.
9. Describe and analyse human movement.
10. Describe and analyse the evidence-based physiotherapy protocols for disorders of the musculoskeletal system.
11. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the musculoskeletal system and possible functional repercussions.
12. Describe clinical practice guidelines applied to disorders of the musculoskeletal system.
13. Describe the circumstances that can influence priorities when using physiotherapy to treat disorders of the musculoskeletal system.
14. Display critical reasoning skills.
15. Enumerate the different types of material and apparatus for using physiotherapy to treat disorders of the musculoskeletal system.
16. Establish diagnostic physiotherapy hypotheses through clinical cases with disorders of the musculoskeletal system.
17. Express ideas fluently, coherently and correctly, both orally and in writing.
18. Identify situations in which a change or improvement is needed.
19. Identify the physiological and structural changes that may occur as a result of physiotherapy intervention in disorders of the musculoskeletal system.
20. Identify the principal forms of sex- or gender-based inequality present in society.

21. Identify the social, economic and environmental implications of academic and professional activities within one's own area of knowledge.
22. Locate the different muscles through surface palpation.
23. Make the most correct decisions in given situations.
24. Organise and plan.
25. Propose new methods or well-founded alternative solutions.
26. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
27. Solve problems.
28. Use physiotherapy to treat clinical cases involving musculoskeletal system conditions.
29. Weigh up the impact of any long- or short-term difficulty, harm or discrimination that could be caused to certain persons or groups by the actions or projects.
30. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.

Content

CLINICAL EVALUATION IN PHYSIOTHERAPY OF THE LOCOMOTOR SYSTEM (ACFL)

I. INTRODUCTION - TERMINOLOGY/CONCEPTS (13.09.2023 Dr. H. Corominas)

- Presentation of the objectives and development of the subject
- Approach to clinical terminology

II. THE LOCOMOTIVE APPARATUS. GENERALITIES (18.09.2023 Dra. P. Moya)

Study of the locomotor system, understood as the interaction of different systems that allow us to move and move. It will include studies d

- Osteology
- Myologia
- Artrology

III. PILLARS OF CLINICAL EVALUATION PHYSIOTHERAPY OF THE LOCOMOTOR APPARATUS

- Anamnesis, Inspection and Exploration (20.09.2023 - Dra. B. Magallares)
- Alteration of mobility as an indicator sign (20.09.2023 - Dra. B. Magallares)

IV. PAIN AS A SYMPTOM

- Pain as an indicator symptom(27.09.2023 - Dra.. Moya)

V. BASIC NEUROLOGIC EXAM

- Basic skills in nurologic evaluation (9.10.2023 - Dr. Corominas)

VI. CLINICAL EVALUATION AT DIFFERENT AGES

- Clinical evaluation in the pediatric age (22.09.2023 - Dra. B. Magallares)
- Clinical evaluation in the elderly (22.09.023 - Dra. Magallares))

VII. CLINICAL ASSESSMENT OF GAIT

- Clinical evaluation of gait (4.10.2023 - Dra. Moya)

- Causes of walking difficulties (4.10.2023 - Dra. Moya)

VIII. DIAGNOSTIC TECHNIQUES FOR THE IMAGE I (27.10.2023 - Dra. Moya)

IX DIAGNOSTIC TECHNIQUES FOR THE IMAGE II (3.11.2023 - Dra. Magallares)

X. CLINICAL ASSESSMENT BY ANATOMIC-FUNCTIONAL REGIONS.1. Raquis

. Columna Cervical (29.11.2023 - Dra. Magallares)

. Columna Dorsal (29.11.2023 - Dra. Magallares))

. Columna Lumbar ((29.11.2023 - Dra. Magallares)

2. Upper limb

. Shoulder and elbow (11.12.2023 - Dra. Magallares)

. Wrist and hand (11.12.2023 - Dra. Magallares)

3. Lower limb

. Maluc i Pelvis (13.12.2023 - Dra. Moya)

. Genoll (13.12.2023 - Dra. Moya)

. Turmell i Peu (13.12.2023 - Dra. Moya)

All classes in group X will be complemented with clinical evaluation and exploration of each of the structures in clinical seminars.

Seminars (Obligatory)

Seminary 1. ACFL-PAUL G 1-2 (16.10.2023 -Dra. Magallares)

Seminary 1. ACFL-PAUL G 3-4 (18.10.2023 - Dra. Magallares)

Seminary 2. ACFL-PAUL G 1-2 (6.11.0223 - Dra. Magallares)

Seminary 2. ACFL-PAUL G 3-4 (8.11.2023 - Dra. Magallares)

Seminary 3. ACFL-PAUL G 1-2 (13.11.2023 - Dra. Moya)

Seminary 3. ACFL-PAUL G 3-4 (15.11.2023 - Dra. Moya)

Seminary 4. ACFL-PAUL G 1-2 (20. 11.2023 - Dr. Corominas)

Seminary 4. ACFL-PAUL G 3-4 (20. 11.2023 - Dr. Corominas)

Seminary 5. ACFL-PAUL G 1-2 (1.12.2023- Dra. Moya)

Seminary 5. ACFL-PAUL G 3-4 (1.12.2023 - Dra. Moya)

Methodology

1. The theoretical classes will be face-to-face and the following work methodology is proposed: duration 2 hours \

2. The practices, will be given by the physiotherapist Carlos López and will develop in the classrooms of practices, in accordance with the established calendar and the measures of hygiene imposed by the University in relation to the covid19

It should be remembered that this guide may be subject to change after publication, depending on the events related to the coronavirus pandemic.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
CLASSROOM PRACTICES	9	0.36	7, 1, 3, 4, 5, 8, 9, 10, 11, 13, 15, 16, 21, 20, 18, 24, 30, 23, 25, 26, 14, 28, 27, 6, 29
SEMINARS	10	0.4	7, 1, 3, 4, 5, 9, 11, 16, 21, 20, 18, 22, 30, 25, 26, 28, 6, 29
THEORY	26	1.04	7, 1, 5, 8, 9, 11, 13, 12, 16, 19, 21, 20, 18, 22, 30, 25, 26, 28, 6, 29
Type: Autonomous			
PERSONAL STUDY	19	0.76	7, 1, 3, 4, 5, 8, 9, 10, 11, 13, 12, 15, 16, 19, 21, 20, 18, 22, 30, 25, 26, 28, 6, 29
READING ARTICLES	30	1.2	7, 2, 1, 3, 4, 5, 9, 10, 11, 12, 16, 19, 21, 20, 18, 30, 25, 26, 28, 6, 29
READING ARTICLES /REPORTS OF INTEREST	50	2	7, 2, 1, 3, 4, 5, 8, 9, 10, 11, 13, 12, 15, 16, 17, 19, 21, 20, 18, 24, 30, 25, 26, 14, 28, 27, 6, 29

Assessment

Single Assessment

This subject does not provide the single assessment system

Avaluation:

Tipology	Duration	Description of the tests	Evaluation criteria	Minimum grade to pass	% of total grade	Schedule
Written exam clinical cases	It depends on the number of questions	multiple choice exam based on clinical cases and general issues	The wrong questions answered will remain in the final evaluation	YES- 2.5 points	50	
Practical exam	variable			NO	30	

		Resolution of practical cases assigned randomly				
		Video projections and written answers				
Images exam	It depends on the number of questions	Examination with projected images and test type response. Several possible answers and a true one	The wrong questions answered will remain in the final evaluation	NO	20	
Recovery exam	Variable	Compendium of the subject Written test with a mixed format: test response and written answer		5		official data on January 2023

It is mandatory to take all three exams in order to assess the student, otherwise the student's record will be recorded as a "non-assessable".

The image exam and the written test - clinical cases, will be carried out at the end of the course and before the practical exam.

The practical exam will be held after the theoretical exams.

The maximum scores that can be obtained from each exam are: Written test - 5 points, Picture exam - 2 points, Practical exam - 3 points

The final mark of the subject will be the sum of the mark of each exam (images + writing + practical), to be able to sum up the scores. Remember that a minimum grade of 2.5 points is required for the written examination of clinical cases in order to take the average. If it is not achieved, the average will not be taken and the subject will be listed as suspended.

The subject will be considered passed with a score equal to or greater than 5 points and suspended with a score equal to or less than 4.9 points.

Students who have not passed the subject will be able to take a resit test, which will be held on the official date of January 2024.

Students who have not taken any of the three assessment exams will not be entitled to the resit test.

The retake test will include all the theoretical and practical content of the subject and will be done in writing, in a mixed format such as test and written answer to a series of questions. In this case there will only be two possible qualifications that will appear in the final act: approved (equal or greater than 5 points) or suspended (equal or less than 4.9 points)

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Practical type evaluation through objective and structured clinical evaluation	30%	4.42	0.18	7, 1, 3, 4, 5, 8, 9, 10, 11, 13, 12, 15, 16, 19, 21, 20, 18, 24, 30, 23, 25, 26, 28, 27, 6, 29

Written evaluation through objective tests: clinical cases	50%	1.08	0.04	7, 2, 1, 3, 4, 5, 8, 10, 11, 13, 12, 15, 16, 17, 21, 20, 18, 24, 30, 25, 26, 14, 28, 27, 6, 29
Written evaluation through objective tests: multiple choice items (images)	20%	0.5	0.02	7, 1, 3, 4, 5, 8, 9, 10, 11, 13, 12, 15, 16, 17, 21, 20, 18, 22, 24, 30, 23, 25, 26, 28, 27, 6, 29

Bibliography

- 1- EXPLORACIÓN CLÍNICA PRÁCTICA. Noguier-Balcells. 28 edd. Elsevier. 2016
- 2- FISIOTERAPIA DEL APARATO LOCOMOTOR. Estructuras, funciones, medidas de actuación sobre afecciones. Editorial Ploke-Reichel. 2007
- 3- EVOLUCIÓN HUMANA. Roger Lewin. Salvat-Editores 2000.
- 4- EXPLORACIÓN FÍSICA DE LA COLUMNA VERTEBRAL Y LAS EXTREMIDADES. Stanley Hoppenfeld. 1979
- 5- DIAGNOSTICO FISOTERÁPICO. CONCEPCIÓN, REALIZACIÓN, APLICACIÓN EN LA PRÁCTICA LIBRE Y HOSPITALARIA. Éric Viel. ED. Masson- 2006
- 6- TÉCNICAS DE BALANCE MUSCULAR. Daniel's y Wothingham Ed. Elsevier. 2014
- 7- PRUEBAS CLINICAS PARA PATOLOGIA OSEA, ARTICULAR Y MUSCULAR. K.Buckup. ED. Masson. 2013
- 8- PROCESO EVALUATIVO MUSCULOESQUELÉTICO. Hazel M.Clarkson. Ed. Paidotribo. 2003
- 9.- THE MUSCLE AND BONE PALPATION MANUAL. Joseph E. Muscolino. Mosby Elsevier 2008
- 10.- MANUAL DE PRUEBAS DIAGNÓSTICAS. TRAUMATOLOGÍA Y ORTOPEDIA. A.Jurado Bueno, Ivan Medina Porqueres Ed Paidotribo- 2002.
- 11.- EXPLORACIÓN Y EVALUACIÓN NEUROMUSCULOESQUELÉTICA. UN MANUAL PARA TERAPEUTAS. Nicola J.Petty, Ann P. Moore. Ed. Mc Graw-Hill-Interamericana. 2003
12. KENDALL'S. MUSCULOS, PRUEBAS, FUNCIONES Y DOLOR POSTURAL. Florence Peterson Kendall, Elizabeth Kendall McCreary, Patricia Geise Provance. Edit. . Marban. 5 ed. 2008
13. ATLAS DE ANATOMIA PALPATORIA. Serge Tixá (tomus 1 i 2) Ed Elsevier(3ed) . Barcelona 2014

webbs of interest

www.efisioterapia.net

www.fisonet.net

www.aefi.net

www.scfisioterapia.cat

Software

There is no need for a specific program for the subject

In the case of virtual classes, the TEAMS application will be used, like la: