

Medical-surgical Pathology

Code: 103014
ECTS Credits: 6

2025/2026

Degree	Type	Year
Physiotherapy	FB	2

Contact

Name: Jordi Cuartero Archs

Email: jordi.cuartero@uab.cat

Teachers

Jimena Carolina Terra

Jean Claude Perrot

Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

To acquire the knowledge about of physio-pathological concepts and diagnostic techniques of the musculoskeletal system.

Objectives and Contextualisation

The subject is scheduled in the second year of the degree of physiotherapy and is part of the specific training. The knowledge of the musculoskeletal system pathology is crucial, as well as its basic medical and surgical treatments. The learning of physiotherapeutic applications in each pathology is also essential.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Analyse and synthesise.
- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.

- 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. Analyse the sex- or gender-based inequalities and the gender biases present in one's own area of knowledge.
4. Consider how gender stereotypes and roles impinge on the exercise of the profession.
5. Enumerate the medico-surgical treatments, mainly in the area of physiotherapy and orthopaedics, that are used in the principal diseases that can be treated by physiotherapy.
6. Explain the physiopathology of the principal diseases that can be treated by physiotherapy and identify the symptoms that appear during the process.
7. Identify situations in which a change or improvement is needed.
8. Identify the social, economic and environmental implications of academic and professional activities within one's own area of knowledge.
9. Propose new methods or well-founded alternative solutions.
10. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
11. Propose projects and actions in accordance with the principles of ethical responsibility and respect for fundamental rights, diversity and democratic values.
12. 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.
13. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.

Content

PROGRAM

THEORY

- 1- Joint degenerative pathology. Osteoarthritis, arthroplasty, arthrodesis
- 2- Joint inflammatory pathology. Arthritis
- 3-Fractures. Generalities
- 4-Fracture repair process
- 5-Methods of containment of fractures
- 6-Complications of consolidation
- 7-Principles of osteosynthesis
- 8- Muscle pathology
- 9- Inflammatory and bursal pathology
- 10- Peripheral nerve injuries
- 11- Physeal injuries. Fractures in the child
- 12- Infections in the Skeletal System
- 13- Infections in the musculoskeletal system II
- 14-Traumatic tendon injuries
- 15- Femur fractures. hip lux
- 16-Hip fractures (Dr. Perelli)
- 17-Fx diaphyseal and supracondylar femur.
- 18- Fx patella and extensor apparatus
- 19-Meniscal knee injuries
- 20- Ligamentous knee injuries
- 21-Fx proximal and diaphyseal tibia
- 22- Fx and ankle dislocations
- 23- Fx and dislocations of the foot

- 24- Shoulder dislocations
- 25- Fracture of proximal humerus.
- 26- Shaft fractures of the humerus
- 27- Fractures around the elbow
- 28- Forearm and wrist fractures
- 29- Fractures of the carpus and hand
- 30- Spinal pain. spinal pathology
- 31- Vertebral Fx
- 32- Non-traumatic pathology of the shoulder (rotary cuff)
- 33- Non-traumatic pathology of the elbow
- 34- Non-traumatic pathology wrist and hand

Other entities:

- 35-Main oncological pathology
- 36-Most prevalent thoracic, cardiac and abdominal surgery
- 37-Vascular surgery (eess/eeii amputation)

SEMINARS

- SEMINAR 1. Material for osteosynthesis and implants
- SEMINAR 2- Musculotendinous ultrasound evaluation
- SEMINAR 3 -RX session. Interpretation of complementary examinations
- SEMINAR 4 clinical cases and reasoning
- SEMINAR 5- clinical cases and gender
- SEMINAR 6-"Clinical case studies (introductions and small group work).
- SEMINAR 7- presentation and evaluation of the clinical cases.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
<hr/>			
Type: Directed			
SPECIFIC SEMINAR (SESP)	10	0.4	
THEORY (TE)	35	1.4	2, 5, 6
<hr/>			
Type: Supervised			
TUTORIALS	14.5	0.58	5, 6
<hr/>			
Type: Autonomous			
CRITICAL READING OF SCIENTIFIC RESEARCH	30	1.2	2, 5, 6
DEVELOPMENT OF HOMEWORK	30	1.2	2, 5, 6
HOME STUDY	29	1.16	2, 5, 6

Teaching is based on theoretical-practical classes.

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.

Assessment

Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class attendance and active participation	0-5%	0.5	0.02	1, 5, 6, 8, 7, 13, 9, 11, 4
Written evaluation by objective tests: multiple choice questions	95%	1	0.04	2, 3, 5, 6, 8, 7, 13, 9, 10, 12

Single Assessment:

Students who request it through the established procedure may opt for the single assessment, completing all evaluations on a single date, with no mandatory attendance at PLABs or any other teaching activity. The final grade will be the average of the written assessments (partial exams). 95% of the final grade corresponds to multiple-choice written tests, and 0-5% corresponds to the evaluation of transversal competences.

Course Assessment:

In any of the partial exams, resits, or the single assessment, the content covered may include material from both lectures and seminars.

- First Partial Exam:

Covers topics 1 to 17 (inclusive) from the current syllabus, as well as the seminars conducted up to the exam date for all three class groups. The exam consists of 20 multiple-choice questions, each with 4 options and only one correct answer. Each incorrect answer deducts 0.33 points. A minimum score of 5 out of 10 is required to be included in the final average.

- Second Partial Exam:

Covers topics 18 to 34 (inclusive) from the current syllabus, along with the seminars conducted up to the exam date for all three class groups. The exam includes 20 multiple-choice questions with 4 options and only one correct answer. Each incorrect answer deducts 0.33 points. A minimum score of 5 out of 10 is required to be included in the final average.

According to the UAB Governing Council's assessment regulations (17/11/2010), the grading scale is as follows:

- 0 to 4.9 = Fail
- 5 to 6.9 = Pass
- 7 to 8.9 = Good
- 9 to 10 = Excellent

The course will be considered passed if the average of the two exams is equal to or higher than 5.

Class Attendance:

Attendance and participation in class add value but are not a requirement to pass.

Bibliography

SPECIFIC BIBLIOGRAPHY

-Lecciones básicas en Cirugía Ortopédica y Traumatología. Ignacio Proubasta. Ed Permanyer (se dara copia a los alumnos en PDF)

-Fracturas en el adulto. Rockwood and Green. Marban libros. Madrid 2003.

-Campbell. Cirugía Ortopédica. Elsevier-Mosby. Madrid 2004.

-Manual de Cirugía Ortopédica y Traumatología se la Sociedad Española de Cirugía Ortopédica y Traumatología (SECOT). 2ª Edición. Madrid 2010. Ed. Panamericana

-Patología del Aparato Locomotor. Tomas Jolín y Antonio Silvestre. Ed. Síntesis. Madrid 1996.

-Traumatología: Manuel Bastos.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/ alma991004466779706709

-Traumatología: Balibrea Cantero, JL.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/avjcib/ alma991002410109706709

-Manual SERMEF de rehabilitación y medicina física.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/avjcib/ alma991005160739706709

SUPPORT BIBLIOGRAPHY

-Biología y biomecánica de las fracturas. Perren P.S. Masson Barcelona 2003.

-Ortopedia Infantil cotidiana. Dimeglio A. Masson Barcelona 1991.

-Apuntes de ortopedia infantil. Julio de Pablos. Ed ergon SA. 2000

-Manual AO de Osteosíntesis.

INTERNET WEBPAGES

-www.ncbi.nlm.nih.gov/pubmed

-www.secot.es

-www.efisioterapia.net

-www.sedolor.es

-www.sefidsp.es

-www.aefi.net

-www.sermef.es

Software

Microsoft PowerPoint

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(SEM) Seminars	201	Catalan/Spanish	second semester	afternoon
(SEM) Seminars	202	Catalan/Spanish	second semester	afternoon
(SEM) Seminars	203	Catalan/Spanish	second semester	afternoon
(TE) Theory	201	Catalan/Spanish	second semester	afternoon