

Degree	Type	Year
Physiotherapy	OB	1

## Contact

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## Teachers

Ana Victoria Lobato Bonilla

Pere Perez-Portabella Cuso

Nicolas Moreno Fortes

Miriam Herrera i Llamas

Eduard Coll Del Cura

## Teaching groups languages

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

## Prerequisites

The student will acquire the commitment to maintain an attitude of professional ethics in all their actions.

The student will have clear concepts of anatomy and basic palpation anatomy, such as knowing and recognizing the different planes and axes with their movements.

It is imperative that each student wear comfortable clothes, a sheet, shawl or towel to place on the stretcher and his GONIOMETER.

## Objectives and Contextualisation

The subject is programmed in the first year of the Physiotherapy degree and forms part of the group of basic training subjects. It is, therefore, part of the scientific basis necessary for the formation of the Physiotherapy graduate.

This subject aims to publicize techniques of manual therapy of the joints and indications of the corresponding treatment.

It is complemented with other basic and compulsory subjects, such as Anatomy, Physiology, Biophysics, Instrumental Evaluation of the Locomotor System, Therapeutic Techniques of the Locomotor System, and Physiotherapy in the Pathology of the Locomotor System.

## Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Analyse and synthesise.
- 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.
- 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 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. Communicate using language that is not sexist.
4. Consider how gender stereotypes and roles impinge on the exercise of the profession.
5. Critically analyse the principles, values and procedures that govern the exercise of the profession.
6. Define general and specific objectives when using physiotherapy treatment for disorders of the musculoskeletal system.
7. Describe and analyse human movement.
8. Describe and analyse the evidence-based physiotherapy protocols for disorders of the musculoskeletal system.
9. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the musculoskeletal system and possible functional repercussions.
10. Describe the circumstances that can influence priorities when using physiotherapy to treat disorders of the musculoskeletal system.
11. Display critical reasoning skills.
12. Express ideas fluently, coherently and correctly, both orally and in writing.
13. Identify situations in which a change or improvement is needed.
14. Identify the principal forms of sex- or gender-based inequality present in society.
15. Identify the social, economic and environmental implications of academic and professional activities within one's own area of knowledge.

16. Make the most correct decisions in given situations.
17. Organise and plan.
18. Propose new methods or well-founded alternative solutions.
19. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
20. Solve problems.
21. Use physiotherapy to treat clinical cases involving musculoskeletal system conditions.
22. 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.
23. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.

## Content

### UPPER MEMBER PART:

The group is divided into four groups G1 G2 G3 and G4.  
Each group has an assigned teacher:

Ana Lobato Bonilla, email: [anavictoria.lobato@uab.cat](mailto:anavictoria.lobato@uab.cat)

Miriam Herrera Llamas, email: [miriam.herrera@uab.cat](mailto:miriam.herrera@uab.cat)

Nicolàs Moreno Fortes, email: [nicolas.moreno@uab.cat](mailto:nicolas.moreno@uab.cat)

Pere Pérez-Portabella Cusó, email: [Pere.PerezPortabella@uab.cat](mailto:Pere.PerezPortabella@uab.cat)

ALL THE PROFESSORS WHO INTRODUCE THIS SUBJECT, TEACH THE GLOBALITY OF THE THEORY AND THE UPPER MEMBER

1.Introduction to manual therapy:

- definition
- generalities

2, 3 and 4. Articular physiology:

- Articulations and joint surfaces
- Planes, axes, anatomical directions
- Joint positions
- Joint movements: rotation and translation
- Physio-physiological movements: rolling and sliding
- Types of limitations
- Evaluation of movement
- Concave / convex rule

5. TMP of the scapular waist joints: sternocostoclavicular, acromioclavicular, scapulothoracic and glenohumeral:

Anatomical and biomechanical memory

Goniometry

Joint range

Types of articulation

Concave-convex law

Simple passive mobilizations (MPS) of the scapulo-thoracic joint, and MPS in the direction of flexion, extension, abd, add, abd and add horizontal, external and internal rotations, circumduction and technique of structure relaxation.

Tractions

Specific passive mobilization (MPE) in caudal, cranial, ventral and dorsal-caudal

Functional passive mobilizations (MPF)

6. TMP joints of the elbow: humerus-ulnar, humerus-radial, upper-lower radial-ulnar:

Anatomical and biomechanical memory

Goniometry

Joint range

Types of articulation

Concave-convex law

MPS in the direction of flexion, extension, supination and pronation and technique of structure relaxation.

Tractions

MPE in ventral and dorsal direction, anterior and posterior glide of the radius, in valgus and varus of elbow.

MPF

7. TMP of wrist, carpus, hand and fingers:

Anatomical and biomechanical memory

Goniometry

Joint range

Types of articulation

Concave-convex law

MPS in the direction of flexion, extension, radial and ulnar deviation, circumduction and structure relaxation technique

Tractions

MPE caudal, cranial, ventral and dorsal, radial and ulnar, dorsal and palmar glide of the metacarpal joint

MPF

8. TMP of the thumb:

Anatomical and biomechanical memory

Goniometry

Joint range

Types of articulation

Concave-convex law

MPS in the direction of flexion, extension, abd, add, external and internal rotations, opposition movement, circumduction and technique of structure relaxation.

Tractions

MPE in radio-ulnar, dorsal and palmar sense

MPF

#### LOWER MEMBER PART:

The group is divided into four groups G1, G2, G3 and G4.

Each group has an assigned teacher:

Miriam Herrera Llamas, email: [miriam.herrera@uab.cat](mailto:miriam.herrera@uab.cat)

Nicolas Moreno Fortes, email: [nicolas.moreno@uab.cat](mailto:nicolas.moreno@uab.cat)

Pere Pérez-Portabella Cusó, email: [Pere.PerezPortabella@uab.cat](mailto:Pere.PerezPortabella@uab.cat)

Eduard Coll del Cura, email: [eduard.coll@uab.cat](mailto:eduard.coll@uab.cat)

ALL THE PROFESSORS WHO INTRODUCE THIS SUBJECT, TEACH THE GLOBALITY OF THE LOWER MEMBER SUBJECT

1. Introduction to manual therapy:

- Generalities

2. Articulation (art.) Coxofemoral:

- Anatomical and physiological summary

- Goniometry

- Joint movements

- Concave / convex law
- Manual therapy
- Simple Passive Mobilization (MPS)
- Specific Passive Mobilization (MPE)
- Traction

### 3. Knee joints:

Art. Femoropatellar

Art. Femorotibial

Art Tibio-peronea proximal

- Anatomical and physiological summary
- Goniometry
- Joint movements
- Manual therapy: MPS, MPE and traction

### 4. Ankle joints:

Art. Tibio-peronea distal

Art. Tibio-peronea-astragalina

Art. Astragalus-calcaneus or subtalar

- Anatomical and physiological summary
- Goniometry
- Joint movements
- Manual therapy: MPS, MPE and traction

### 5. Joints of the foot:

Art. of Chopart or transverse of tarsus

Art. of Lisfranc or tarso-metatarsus

Mediotarsian Art.

Intermetatarsian Art.

Metatarsophalangeal Art. of the 1st finger

Interphalangeal Art. of the fingers:

- Anatomical and physiological summary
- Goniometry
- Joint movements
- Manual therapy: MPS, MPE and traction

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
LABORATORY PRACTICES	3	0.12	2, 6, 7, 8, 9, 10, 12, 17, 16, 11, 21, 20
THEORY	49.5	1.98	2, 6, 7, 9, 10, 12, 17, 16, 11, 21, 20
Type: Supervised			
ORAL PRESENTATION / EXPOSITION OF WRITTEN WORKS	22.5	0.9	2, 6, 7, 8, 9, 10, 12, 17, 16, 11, 21, 20

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Type: Autonomous

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PREPARATION OF WRITTEN WORKS / SELF STUDY	64.34	2.57	2, 6, 7, 8, 9, 10, 12, 17, 16, 11, 21, 20
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## Autonomous Activities

### Written Assignment:

Students will be required to complete a clinical case resolution, integrating and reasoning through the knowledge acquired in class. This assignment will be completed in pairs.

- The final work must be submitted either in paper format or via email, depending on the instructor's instructions.
- The maximum length is 10 pages.  
Submissions exceeding this limit or in incorrect formats will not be accepted.
- Mandatory requirements:
  - Photographs illustrating the techniques used.
  - Directional arrows must be included to indicate the direction of mobilizations and movements.
  - A clear explanation and justification of the selected mobilization technique must be provided.
- Formatting guidelines:
  - Font: Arial, size 12
  - Line spacing: 1.5

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## Directed Activities

### Laboratory Practices:

These sessions will be carried out in facilities equipped for physiotherapy training. The instructor will first demonstrate various techniques on a model, followed by hands-on student practice.

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## Supervised Activities

Under the supervision of the instructor, students will practice the demonstrated techniques with one another, reinforcing the skills learned in class in a controlled and safe environment.

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
DELIVERY OF REPORTS / WRITTEN WORKS 20%	20% final grade	10	0.4	2, 6, 7, 8, 9, 10, 12, 17, 16, 11, 21, 20

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OBJECTIVE MULTIPLE CHOICE ITEM SELECTION TEST 10% and STRUCTURED ORAL TESTS 70%	80% final grade	0.66	0.03	5, 2, 1, 3, 6, 7, 8, 9, 10, 12, 15, 14, 13, 17, 23, 16, 18, 19, 11, 21, 20, 4, 22
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#### Assessment:

This subject does not include a single-assessment system.

The evaluation of the theoretical part of the subject is worth 1 point (out of 10) of the overall grade and will be assessed through a multiple-choice exam of approximately 15 questions, with only one correct answer, and a penalty of 0.33 points for each incorrect answer. The duration of the exam will be 30 minutes. A minimum score of 5 is required in this exam in order to average it with the lab practice grades.

The evaluation of the laboratory practices accounts for 7 points (out of 10) of the overall grade. It will be assessed through two partial oral theoretical-practical exams. Each partial exam is worth 3.5 points. A minimum score of 5 is required in each of these partial exams in order to average them with the theoretical exam. Attendance to lab practices is mandatory. Each exam will last approximately 30 minutes per pair. **STUDENTS MUST PASS BOTH THE ORAL AND PRACTICAL PARTS OF THESE EXAMS TO PASS THIS EVALUATION.**

Two written assignments will be produced, one for the upper limb block and another for the lower limb block, to be submitted 15 days after the last practical class of each block. Assignments will be done in pairs. **ASSIGNMENTS CREATED USING ARTIFICIAL INTELLIGENCE WILL NOT BE ACCEPTED.** Each assignment is worth 1 point (out of 10), for a total of 2 points toward the final grade. A minimum score of 5 is required on each assignment in order to average with the theoretical exam and lab practice exams. Late submissions or work created using AI tools will automatically receive a FAIL grade. Students must address a joint limitation for each limb (upper and lower). Assessment criteria include:

- Coherence in applying theoretical knowledge.
- Application of practical content taught in class.
- Presentation, structure, clarity in explanations. Spelling mistakes may result in failing the written assignment.
- A photo sequence of the mobilization techniques for the limitation is mandatory, along with corresponding reasoning.

The final grade for the subject will be the sum of the following:

- Theoretical knowledge assessment (10%)
- Lab practices assessment (70%)
- Written assignments (20%)

A final grade equal to or above 5 is required to pass the course.  
A 4.9 IS A FAIL.

Students who do not attend any of the 5 assessment activities will receive a "not assessed" mark in their academic record.

Students who do not attend the scheduled review session will not be allowed to review their exam at any other time. Reviews are always in person.

Only students who have failed the theory exam and/or the lab exams and/or the written assignments may attend the retake exam.  
Students with a "not assessed" mark cannot attend the retake.

In the retake exams (theory, practical, or assignments), the maximum score a student can earn is 6. A score below 5 on the retake is a fail, and the subject must be retaken the following academic year.

Retake scores are converted as follows:

- A 5 = final score of 5
- A 6 = final score of 5.2
- A 7 = final score of 5.4
- An 8 = final score of 5.6
- A 9 = final score of 5.8
- A 10 = final score of 6

Retake exams do not serve to improve the grade.

If any kind of plagiarism or cheating is detected in the exams or assignments, the subject will be automatically failed with a score of 0.

CLASS ATTENDANCE IS MANDATORY. Any absence must be justified. A student who has two or more absences (justified or not) per block will not be eligible for the first evaluation and will need to take the retake exam.

Each unexcused absence will result in a deduction of 0.25 points from the final grade.

Justification documents signed by the student or family members (parents, siblings, etc.) will not be accepted. Excuse notes must be sent by email to [eduard.coll@uab.cat](mailto:eduard.coll@uab.cat). If no justification is received, the absence will be considered unexcused and 0.25 points will be deducted from the final grade.

Late arrivals (over 10 minutes) will not be allowed into class and will be considered an absence.

Use of social media (WhatsApp, Facebook, Instagram, Twitter, TikTok, etc.) on a mobile device during theory or practical classes is strictly forbidden. Each use will result in a deduction of 0.25 points from the final grade.

Students retaking the subject must be assessed in all five parts: theory exam, the two practical exams, and both written assignments (upper and lower limb).

In their case, class attendance is not mandatory, provided they justify any absences due to overlapping schedules with other classes or practicals.

The justification must be sent to the group's teacher and include a statement signed by the respective teacher with the date, time, class name, and signature.

Students who do not complete both the theoretical and practical assessments will be marked as "not assessed", and will forfeit their registration rights for the subject.

## **Bibliography**

### Most relevant bibliography:

Kinesioterapia. III miembro superior IV cabeza y tronco. Genot. Ed. Panamericana. 2002 Madrid  
Kinesioterapia. I miembro superior II raquis. Genot. Ed. Panamericana. 2002 Madrid  
Compendio de terapia manual. D.Heiman. Ed. Paidotribo 2006  
Anatomía palpatoria y localización superficial. Derek Fiel. Ed. Paidotribo 2001 Barcelona  
Manual de cirugía ortopédica y traumatología. Tomo II. Sociedad española de cirugía ortopédica y traumatológica. Ed. Panamericana  
Fundamentos de las técnicas de evaluación musculoesquelética. M.Lynn Palmer, Marcia E.Epler. Ed. Paidotribo 2002 Barcelona



Fisioterapia manual extremidades. FM Kaltemborn. Ed. McGRAW-HILL- INTERAMERICANA,S.A.U. Madrid 2001

KAPANDJI I.A. Fisiología Articular. Tomo 1. Madrid: Panamericana. 6ª Edición. 2006

KAPANDJI I.A. Fisiología Articular. Tomo 2. Madrid: Panamericana. 6ª Edición. 2010

KAPANDJI I.A. Fisiología Articular. Tomo 3. Madrid: Panamericana. 6ª Edición. 2007

Goniometría: una herramienta para la evaluación de las incapacidades laborales. 1a ed- Buenos Aires: Asociart ART, 2007

## Software

No specific software required

## 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
(PLAB) Practical laboratories	101	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	102	Catalan	second semester	morning-mixed
(PLAB) Practical laboratories	103	Catalan	second semester	afternoon
(PLAB) Practical laboratories	104	Catalan	second semester	afternoon
(TE) Theory	101	Catalan	second semester	morning-mixed