

**COURSE DATA****DATA SUBJECT**

Code: 33024
Name: Physiotherapy in clinical specialities I
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

| Degree | Center | Acad. year | Period |
|--------------------------------|--------------------------|------------|----------------|
| 1202 - Degree in Physiotherapy | Facultat de Fisioteràpia | 3 | Second quarter |

SUBJECT-MATTER

| Degree | Subject-matter | Character |
|--------------------------------|--|------------|
| 1202 - Degree in Physiotherapy | Physiotherapy in clinical specialities | COMPULSORY |

COORDINATION

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SUMMARY

In the subject Physiotherapy in Clinical Specialities I, the student is expected to delve into the knowledge, skills and attitudes necessary to plan, intervene and evaluate physiotherapy action for the promotion, prevention and recovery of health in rheumatic and/or orthopedic conditions.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

OTHER REQUIREMENTS

It is not necessary previous requirements.

COMPETENCES / LEARNING OUTCOMES**1202 - Degree in Physiotherapy**



Have the ability to organise and plan work.

Know and apply good clinical practice guides.

Know how to apply the different physiotherapy techniques of promotion, prevention and health preservation in rheumatic and orthopaedic conditions, coagulopathies, oncological conditions, urogynecology, obstetrics, amputations and re-implants.

Know how to assess the applied physiotherapy treatment and write the Discharge report.

Know how to assess the results of the physiotherapy treatment.

Know how to establish a therapeutic plan to reach the goals from the Physiotherapy Diagnosis, established in accordance with internationally recognised standards and international validation instruments.

Know how to plan treatment goals in rheumatic and orthopaedic conditions, coagulopathies, oncological conditions, urogynecology, obstetrics, amputations and re-implants, based on Physiotherapy Clinical Records.

Recognise diversity, multiculturality, democratic values and peace culture.

Respect fundamental rights and equality between men and women.

DESCRIPTION OF CONTENTS

1. Theoretical Program. Clinical Reasoning in Rheumatological and Orthopedic Pathology.

TOPIC 1. Planning of Physiotherapy objectives and actions for the promotion, prevention and conservation of health in rheumatic and orthopedic conditions.

TOPIC 2. Clinical reasoning and approach methodologies in physiotherapy in rheumatological and orthopedic disorders.

TOPIC 3. Assessment of the evolution and results of the patient during physiotherapy treatment in rheumatological and orthopedic conditions.

2. Theoretical Program. Manual Therapy in Rheumatological and Orthopedic Pathology.

TOPIC 4. Introduction to the Fascial system. Assessment and treatment of the fascia. Current scientific and clinical evidence.

TOPIC 5. Physiotherapy of the Myofascial Pain Syndrome. Diagnosis and treatment of trigger points.



3. Theoretical Program. Therapeutic Exercise in Rheumatological and Orthopedic Pathology.

TOPIC 6. Introduction to therapeutic exercise in rheumatological and orthopedic affections. Planning, control variables and progression. Individualized intervention.

TOPIC 7. Therapeutic Exercise in Scoliosis (Schroth Method, adolescent and assessment).

TOPIC 8. Therapeutic exercise in orthopedic vertebral pain and degenerative pain. Individualized intervention.

TOPIC 9. Cardiovascular exercise in rheumatological affections. Methodologies and activities. Effects and scientific evidence.

TOPIC 10. Therapeutic Exercise and Physiotherapy in chronic tendon conditions.

TOPIC 11. Therapeutic Exercise in osteoarthritis of MM.II. Importance of the hip joint and individualized intervention.

TOPIC 12. Therapeutic exercise in orthopedic injuries and conditions of the Upper Limb.

4. Theoretical Program. Physiotherapy in Rheumatological and Orthopedic Pathology.

TOPIC 13. Physiotherapy in vertebral pain of degenerative and rheumatological origin. Spondyloarthritis, discarthrosis, ankylosing spondyloarthritis and other rheumatic disorders of the spine.

TOPIC 14. Physiotherapy in orthopedic affections of the spine. Scoliosis, hyperkyphosis and hyperlordosis. Lumbopelvic spondylolisthesis and spondylolysis.

TOPIC 15. Physiotherapy in degenerative pathology. Generalities in osteoarthritis. Physiotherapy in coxarthrosis, gonarthrosis and arthritic hand.

TOPIC 16. Physiotherapy in rheumatoid arthritis. Physiotherapy in Fibromyalgia. Physiotherapy in metabolic and inflammatory arthropathies.

TOPIC 17. Physiotherapy in the post-surgical period of orthopedic pathology.

5. Theoretical Program. Education and comprehensive approach to rheumatology patients.

TOPIC 18. Clinical practice guidelines in physiotherapy in rheumatological and orthopedic conditions.

TOPIC 19. Fundamental principles and recommendations. Basic knowledge about your pathology. Nocebo and placebo effect. Habits of life in rheumatological pathology.

TOPIC 20. Social networks and health promotion in rheumatology patients.

6. Practical Program (40h).

PRACTICE 1. Clinical reasoning in rheumatological and orthopedic affections. Clinical cases and intervention programs. Therapeutic exercise: prescribe and progress.

PRACTICE 2. Assessment and treatment of the fascial system. Specific methods. From the evidence to the clinic, passing through the perception of the patient.

PRACTICE 3. Treatment of myofascial trigger points of the upper limb and cervical spine.

PRACTICE 4. Treatment of myofascial trigger points of the lower limb and lumbar spine.



PRACTICE 5. Therapeutic exercise in scoliosis 1. Schroth method.
 PRACTICE 6. Therapeutic exercise in scoliosis 2. Schroth method.
 PRACTICE 7. Therapeutic exercise in vertebral pain (cervical, thoracic and lumbar). Intervention in specific pathology (cauda equina syndrome, herniated disc and protrusion, spindylolysis and lumbar listesis; specificity of the cervical spine; Schwermann's disease and hyperkyphosis). Individual and specific therapeutic plan.
 PRACTICE 8. Therapeutic exercise in chronic tendinopathies of the lower limb.
 PRACTICE 9. Therapeutic exercise in rheumatological pathology of the upper limb. Frozen shoulder. Therapeutic exercise in osteoarthritis of the lower limb and in post-surgical joint replacement (prosthesis). Therapeutic exercise in lumbar arthrodesis.
 PRACTICE 10. Application of NMES in rheumatological processes: tendinopathies, post-surgery in knee prosthesis and frozen shoulder.
 Clinical cases: reasoning and integration of interventions in the rheumatological patient.
 SEMINAR: Spine, body awareness and movement.

WORKLOAD

PRESENCIAL ACTIVITIES

| Activity | Hours |
|--------------------|--------------|
| Theory | 20,00 |
| Laboratory | 40,00 |
| Total hours | 60,00 |

NON PRESENCIAL ACTIVITIES

| Activity | Hours |
|---------------------------------------|--------------|
| Attendance at other activities | 0,00 |
| Individual or group project | 20,00 |
| Independent study and work | 0,00 |
| Preparation of lessons | 38,00 |
| Preparation for assessment activities | 32,00 |
| Resolution of case studies | 0,00 |
| Total hours | 90,00 |

TEACHING METHODOLOGY

The theoretical teaching will take place in the classroom with the agenda for the exposure (type lecture participatory activities). Students know in advance the topics in order to answer questions, concepts, and encourage their participation.

In the practical program, students will learn by solving problems and exercises, group activities and case studies, and skills training and procedures used in physiotherapy of rheumatic diseases and orthopedic simulation techniques. It will stimulate work in small groups. The presence of the practices will be mandatory, and missing, justifiably, to 20% of them.



The teaching program might be modified during the development of the subject if the professor considers it appropriate, in order to guarantee the teaching quality and the learning process.

EVALUATION

Theoretical block (40% of the final grade)

Final exam. Written test: a) multiple choice test of 20 questions (20%). Mark = $[(\text{correct answers} - (\text{errors}/\text{number of options} - 1))] \times (\text{maximum mark}/\text{number of questions})$; b) 6 short development questions (20%).

Practical block (60% of the final grade)

40% Practical exam. Simulation and reasoning of the techniques explained in class.

10% Continuous evaluation activities at home.

10% Continuous evaluation of practices and their development.

Attendance at 80% of practices will be mandatory. Due to the non-recoverable nature of the practical classes, non-attendance to practices implies the impossibility of passing the subject in either of the two calls. Those activities of continuous evaluation that require face-to-face due to their particular characteristics, may not be recoverable outside the hours of completion established in the schedule.

It will be necessary for the student to pass both blocks (theoretical and practical) with a 5 out of 10 to make the weighted sum that will constitute the final grade for the subject. The theoretical or practical mark will not be saved.

REFERENCES

Basic

- Atkinson K, Coutts F, Hassenkamp AM. Fisioterapia en ortopedia: un enfoque basado en la resolución de problemas. 2ª edición. Barcelona: Elsevier; 2007.
- Brotzman SB, Wilk KE. Rehabilitación ortopédica clínica. Elsevier 2005
- Buckup K. Pruebas clínicas para patología ósea, articular y muscular. Exploraciones. Signos. Síntomas. 3ª ed. Barcelona: Masson; 2007.
- Houglum PA. Therapeutic exercise for musculoskeletal injuries. 3rd ed. United States: Human Kinetics; 2010.
- Jurado A., Medina I. Tendón. Valoración y tratamiento en fisioterapia. Barcelona: Editorial Paidotribo; 2008.
- Lehnert-Schroth C. Tratamiento funcional tridimensional de la escoliosis. Barcelona: Editorial Paidotribo; 2004



- Meadows JTS. Diagnóstico diferencial en Fisioterapia. Madrid: McGrawHill Interamericana, 2000.
- Mora ER. Rehabilitación y enfoque fisioterápico en afecciones reumáticas. 2ª ed. Madrid: Aula Médica; 2008.
- Reichel H-S, Ploke CE. Fisioterapia del aparato locomotor. Barcelona: Paidotribo; 2007.
- Serra MR., Díaz J., de Sande ML. Fisioterapia en traumatología, ortopedia y reumatología. 2ª ed. Barcelona: Masson; 2003.
- Tixa S. Atlas de anatomía palpatoria. Tomo 1. Tronco y miembro superior. 2ª ed. Barcelona: Masson; 2006.
- Tixa S. Atlas de anatomía palpatoria. Tomo 2. Miembro inferior. 2ª ed. Barcelona: Masson; 2006.
- Travell & Simons. Dolor y disfuncion miofascial. Vol 1. 2ª ed. Philadelphia: Editorial Médica Panamericana; 2002- 2010
- Vleeming A., Mooney V., Stoeckart R. Movimiento, estabilidad y dolor lumbopélvico. Integración de la investigación con el tratamiento. 2ª ed. Barcelona: Masson; 2008.

Additional

- Butler D., Moseley L., Sunyata A. Explicando el dolor. Adelaide: Noigroup publications; 2010.
- Torres R. Columna Cervical; Evaluación clínica y aproximaciones terapéuticas, Vol 1. Madrid: Editorial Médica Panamericana; 2008.
- Weiss HR., Rigo M. Fisioterapia para la escoliosis basada en el diagnóstico. Barcelona: Editorial Paidotribo; 2004.

In addition, each subject will specify the books, scientific articles and readings of interest recommended for the preparation of the contents addressed.