1. CORE DATA

Subject	APPLIED PHYSICAL ASSESSMENT: LOWER LIMB AND UPPER LIMB
Graduate Degree	PHYSIOTHERAPY
School/Faculty	SCHOOL OF SPORTS AND EXERCISE SCIENCES AND PHYSIOTHERAPY.
Year	FIRST
ECTS	6
Type	COMPULSORY
Language/s	CASTELLANO
Modality	ON-CAMPUS ATTENDANCE
Semester	S2
Academic year	2024/2025
Coordinating teacher	María Blanco Morales and Francisco J. Fernández Rodríguez

2. INTRODUCTION

This subject, of a Compulsory nature, is taught in the second semester of the first year of the Bachelor's Degree in Physiotherapy. It is a Compulsory subject worth 6 ECTS.

This subject focuses on the basics of joint physiology of the limbs. This subject prepares students to carry out an exploration and assessment of the limbs from a muscular, articular and neural approach through the validation, reliability and sensitivity of the tests used for their evaluation. Finally, the aim of this subject is for students to deepen their clinical reasoning of the locomotor apparatus.

3. LEARNING OUTCOMES

Knowledge:

CON7. Know and understand the sciences, models, techniques and instruments on which physiotherapy is based, articulated and developed.

CON8. Know the physiological and structural changes that may occur as a result of the application of physiotherapy.

CON10. Know and understand the physiotherapeutic methods, procedures and actions, aimed at both the actual therapy to be applied in the clinic for re-education or functional recovery, and the performance of activities aimed at the promotion and maintenance of health.

CON11. Understand the importance of updating the knowledge, Skills, abilities and attitudes that make up the professional Competencies of the physiotherapist.

- Identify assessment tests aimed at recognised functional status of the patient.

Skills:

HAB1. Apply the different physiotherapy treatments with technical skill and in an integrated manner.

- Apply a proper physical examination of the shoulder girdle, based on correct palpation, inspection, scientifically validated joint and/or muscle tests.
- Apply a proper physical examination of the elbow, wrist and hand, based on correct palpation, inspection, scientifically validated joint and/or muscle tests.
- Apply a proper physical examination of the hip joint, based on correct palpation, inspection, scientifically validated joint and/or muscle tests and examinations.
- Apply a proper physical examination of the knee joint, based on correct palpation, inspection, scientifically validated joint and/or muscle tests and examinations.
- Apply a proper physical examination of the joint complex of the ankle and foot, based on correct palpation, inspection, scientifically validated joint and/or muscle tests.

Competencies:

COMP2. Recognising patients' needs and possible dysfunctions.

COMP24. Transmit messages (ideas, concepts, feelings, arguments), both orally and in writing, strategically aligning the interests of the different agents involved in communication in the academic and professional environment.

COMP28. Integrate analysis with critical thinking in a process of assessment of different ideas or professional possibilities and their potential for error, based on objective evidence and data, leading to effective and valid decision-making.

COMP30. Show ethical behaviour and social commitment in the performance of the activities of a profession, as well as sensitivity to inequality and diversity.

4. CONTENTS

THEORY

1. Lower limb joint physiology
    a. Hip joint physiology
    b. Knee joint physiology
    c. Ankle and Foot Joint Physiology
2. Upper limb joint physiology
    a. Joint physiology of the shoulder girdle
    b. Joint physiology of the elbow region
    c. Wrist and hand joint physiology

3. Clinical Reasoning. Physiotherapeutic exploration and diagnosis of upper limb disorders: validation, reliability and sensitivity of the tests used for their assessment, from a muscular, articular and neural approach.
    a. Shoulder girdle
        i. Clinical reasoning
        ii. Postural Analysis and Functional Relationship of the region
        iii. Joint examination

iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

b. Elbow
i. Clinical reasoning
ii. Postural Analysis and Functional Relationship of the region
iii. Joint examination
iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

c. Wrist and hand
i. Clinical reasoning
ii. Postural Analysis and Functional Relationship of the region
iii. Joint examination
iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

4. Clinical Reasoning. Physiotherapeutic exploration and diagnosis of lower limb disorders: validation, reliability and sensitivity of the tests used for their assessment, from a muscular, articular and neural approach.
a. Hip
i. Clinical reasoning
ii. Postural Analysis and Functional Relationship of the region
iii. Joint examination
iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

b. Knee
i. Clinical reasoning
ii. Postural Analysis and Functional Relationship of the region
iii. Joint examination
iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

c. Ankle and foot
i. Clinical reasoning
ii. Postural Analysis and Functional Relationship of the region
iii. Joint examination
iv. Orthopaedic tests
v. Muscle examination
vi. Neural Scanning

5. TEACHING-LEARNING METHODS

- Masterclasses
- Case study method

- Workshop learning based on workshop learning
- Simulation environments

6. LEARNING ACTIVITIES

The following identifies the types of Learning activities to be carried out and the student's dedication in hours to each of them:

On-campus delivery:

Learning activity	Number of hours
Masterclasses	12
Practical seminars	18
Analysis and resolution of case studies	10
Writing reports and papers	12
Workshop activities and/or Laboratory activities	20
Self-study	56
Debates and panel discussions	8
Tutorials	12
On-campus Face-to face assessment tests	2
Total	150

Description of the Learning activities to be developed in this course.

Activity 1- Integration of theoretical knowledge.
- Master's degree. Debates.
- Teacher presentation in the classroom, with the aim of transmitting knowledge and activating cognitive processes in the student.
- Testing of the knowledge acquired on the syllabus developed in class.

Activity 2- lab practices. Practical objective tests.

- Lab practices
- Classroom practice and simulation environments
- Acquisition of manual dexterity through practical sessions for the assessment of the upper and lower limbs.

Activity 3- Active Methodologies

3.1. Oral presentations

Activity 3.1.1. Intercurricular activity with Anatomy: Design your own model.
Students should be able to design a mock-up of an upper or lower limb joint using homemade materials or other technology that is as realistic as possible.
The model must have all the anatomical structures that make up the joint *(Bone, Ligamentous, Intervertebral Disc or Meniscus)*. They must be able to explain the joint physiology of their assigned joint to their peers using the student-designed model as the only material.

3.2. Simulated Hospital

Attendance at the Simulated Hospital Activity will be valued.

3.3.Discussion forum

Activity 3.3.1. Interdisciplinary activity with occupational therapy. Students will carry out a critical reading of articles on the professional interaction between physiotherapists and occupational therapists and will carry out a canvas debate on their reflections.

3.4. Performance Assessment

The student will be assessed on their daily performance in the classroom.
This will be done by means of a rubric with which the teacher will assess cross-disciplinary competencies such as Ability to manage information, Ethical commitment, ability to work in a team and critical thinking skills.

7. ASSESSMENT

The following is a list of the Assessment systems and their weighting in the total grade for the course:

On-campus delivery:

Assessment systems	Weight
Theoretical assessment tests	20%
Practical Assessment Tests 1 + 2	40%
Oral presentations	10%
Simulated Hospital	10%
Debate forum	10%
Assessment of performance (student day-to-day rubric)	10%

Block I: Knowledge tests

Objective knowledge tests: 60% of the total mark. This block will be assessed by means of 3 tests (1 theoretical test and 1 practical test):

1. Theoretical: 20% of the total grade. There will be a theoretical test consisting of a multiple-choice exam. The grade must be higher than or equal to 5, the content being eliminatory.

2. Practical exercises: 40% of the total mark. It will be assessed according to the rubric. Two practical tests will be carried out: the first with a weight of 20% which will assess the Contents taught in the lower limbs and the second test with a weight of 20% which will assess the contents taught in the upper limbs. The grade for each test must be greater than or equal to 5, with the content being eliminatory.

On-campus attendance is compulsory for more than 50% of the practical classes, being an essential requirement for the student to be able to sit the practical objective tests of the course in the Ordinary Exam period.

If you do not reach the required average, you will have to take the part of Block I not passed in the Extraordinary exam period.

Block II: Active methodological approaches

Active methodologies: 40% of the final mark. Included in the Assessment system as:

1. Oral presentations
2. Reports, papers or discussion forums
3. Simulated hospital
4. Performance Assessment

The grade obtained in this block is the average of the activities carried out. It does not require a minimum cut-off mark for the average.

8. TIMELINE

This section shows the Timeline with dates for the delivery of Assessable activities of the course:

Assessable activities	Date
Theoretical Assessment Test	Week 18
Practical Assessment Test	Week 8 and 15
Activity 3.1.1. Cross-curricular activity with Anatomy: Design your model	Week 15
Activity 3.2.1 Simulated Hospital	Week 14
Activity 3.3.1. Interdisciplinary activity with occupational therapy	Week 18

This Timeline may be subject to modifications due to logistical reasons for the activities. Any modification will be notified to the student in due time and form.

9. BIBL IOGR AFIA

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- Boyling, J and Jull G, (2005). *Grieve's Modern Manual Therapy*. *The Vertebral Column* 1st ed. Churchil Livingstone.
- Butler, D 2000, *The sensitive nervous system*, NOI Publications, Adelaide
- Butler, D 2009, *Explain Pain*, Practical notes from *NOI Courses,* University of Valencia, Valencia
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- Cleland, J (2011), *Netter's orthopaedic clinical examination: an evidence-based approach*, 2nd edn, Saunders/Elsevier, Philadelphia, Pa.
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- Jones, M (2011). "CR Theory & Practice." Practical notes from *MPTP,* ICPY, UniSA, AdelaideJones, M and Magarey, M (2011). "Subjective Assessment."
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- Magarey, M (2011). "CR Theory & Practice." Practical notes from *MPTP,* ICPY, UniSA, Adelaide.
- Schifferergger, E (2009). "Mobilization of the NS." Practical notes from *NOI Courses,* FORTEMA, Pontevedra.
- "Understanding Pain in less than five minutes" [video] Australia: GP Access and Hunter Integrated Pain Service, NSW Goverment; 2011.

10. EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION UNIT

From the Educational Guidance, Diversity and Inclusion Unit (ODI) we offer support to our students throughout their university life to help them achieve their academic achievements. Other pillars of our action are the inclusion of students with specific educational support needs, universal accessibility in the different campuses of the university and equal opportunities.
This unit offers students:

1. Accompaniment and follow-up through counselling and personalised plans for students who need to improve their academic performance.
2. In the subject of attention to diversity, non-significant curricular adjustments are made, i.e. at the level of Methodological and Assessment, for those students with specific educational support needs, thus pursuing equal opportunities for all students.
3. We offer students different extracurricular training resources to develop various Competencies that will enrich their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of Degree.

Students in need of educational support can write to us at:
orientacioneducativa@universidadeuropea.es

11. SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to participate in the Satisfaction Surveys to detect strengths and areas for improvement in the teaching staff, the Qualification and the teaching-learning process.

The surveys will be available in the survey area of your online campus or through your email.

Your feedback is needed to improve the quality of the Degree.

Thank you very much for your participation.