1. BASIC INFORMATION

Subject	Orthopedic Manual Therapy 3: Diagnosis, exploration and treatment of the spine and extremities.
Degree	Bachelor's Degree in Physiotherapy
School/Faculty	European University of Valencia – Faculty of Health Sciences
Year	4th grade
ECTS	6
Character	Optional
Language	English
Modality	In-person
Semester	7
Academic year	2025-2026
Coordinating professor	Dr. Mariana Sánchez Barbadora

2. PRESENTATION

The subject Orthopaedic Manual Therapy 3: Diagnosis, exploration and treatment of the spine and extremities, includes different topics in which various therapeutic approaches are dealt with, always from scientific evidence using orthopaedic manual therapy techniques indicated in neuro-musculoskeletal problems. This provides basic knowledge for the correct execution of different techniques, as well as establishing a correct treatment protocol.

3. COMPETENCIES AND LEARNING OUTCOMES

General Competencies:

- BC1- Students must have demonstrated that they possess and understand knowledge in an area of study that is based on the basis of general secondary education, and is usually at a level that, although supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.
- BC2- Students must know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- BC3- Students must have the ability to gather and interpret relevant data (usually within their area of study) in order to make judgments that include reflection on relevant social, scientific or ethical issues.

- BC4- Students should be able to transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.
- BC5- Students must have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

Transversal competences:

- TC4- Ability to analyze and synthesize: be able to break down complex situations into their constituent parts; also evaluate other alternatives and perspectives to find optimal solutions. Synthesis seeks to reduce complexity in order to better understand it and/or solve problems.
- TC7- Awareness of ethical values: Ability to think and act according to universal principles based on the value of the person that is aimed at his or her full development and that entails commitment to certain social values.
- TC8- Information management: Ability to search, select, analyze and integrate information from diverse sources.
- TC11- Planning and time management: Ability to set goals and choose the means to achieve those goals using time and resources effectively.
- TC17- Teamwork: Ability to integrate and collaborate actively with other people, areas and/or organizations to achieve common goals.

Specific competencies:

- SC19- Understand and apply manual and instrumental methods and procedures for assessment in Physiotherapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.
- SC22- Identify the patient/user's situation through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other health sciences professionals.
- SC24- Understand and carry out specific methods and techniques related to the musculoskeletal system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, the respiratory system, the cardiocirculatory system and alterations in statics and dynamics.
- SC27- Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in their process.

Learning outcomes:

- LO1: Understanding of the fundamental contents related to the contents of the subject.
- LO2: Ability to make a specific diagnosis with manual therapy technique based on scientific evidence.
- LO3: Ability to perform a specific examination with manual therapy techniques based on scientific evidence.

- LO4: Ability to perform a specific treatment with manual therapy techniques based on scientific evidence.
- LO5: Ability to plan specific goals for treatment.
- LO6: Knowledge of the functional implication of the injury in the subject.
- LO7: Ability to act based on compliance with the deontological obligations of the profession and criteria of normo praxis.

The table below shows the relationship between the competencies developed in the subject and the learning outcomes that are pursued:

Competencies	Learning Outcomes
BC1, BC5, TC4, TC8, TC11, SC24	LO1: Understanding of the fundamental contents related to the contents of the subject.
BC2, BC3, TC4, TC7, TC8, SC19, SC22	LO2: Ability to make a specific diagnosis with manual therapy technique based on scientific evidence.
BC1, BC2, TC4, TC8, TC17, SC19, SC22	LO3: Ability to perform a specific examination with manual therapy techniques based on scientific evidence.
BC2, BC3, TC4, TC7, TC8, TC11, SC24, SC27	LO4: Ability to perform a specific treatment with manual therapy techniques based on scientific evidence.
BC2, BC4, BC5, TC11, TC17, SC22, SC27	LO5: Ability to plan specific goals for treatment.
BC1, BC3, BC4, TC4, TC8, SC19, SC24, SC27	LO6: Knowledge of the functional implication of the injury in the subject.
BC3, BC4, TC4, TC7, TC11, TC17, SC22, SC24	LO7: Ability to act based on compliance with the deontological obligations of the profession and criteria of normo praxis.

4. CONTENT

- Critical reading of various articles on diagnosis, examination, and treatment using orthopedic manual therapy techniques based on scientific evidence.
- Evidence-based assessment of orthopedic manual therapy in musculoskeletal pain and motor control.
- Assessment and examination of the subject using orthopedic manual therapy techniques related to articular, myofascial, and neural tissues.
- Assessment and treatment of the spine using orthopedic manual therapy techniques.
- Assessment and treatment of the limbs using orthopedic manual therapy techniques.
- Fundamentals of orthopedic manual therapy in clinical application.

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Simulation environment
- Master Class
- Cooperative learning
- Case method
- Dialogic learning

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

LEARNING ACTIVITY	NUMBER OF HOURS
TUTORING	15
PRACTICAL CLASSES	30
KNOWLEDGE TESTS	4
PRACTICAL CASE ANALYSIS	15
MASTER CLASSES	16
SELF-LEARNING	50
SCIENTIFIC ACTIVITIES	20
TOTAL	**150**

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Assessment System	Weight (%)
Knowledge tests	40
Practical knowledge tests	30
Learning portfolio	30

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. First exam period

To pass the course in the ordinary exam session, you must obtain a grade greater than or equal to 5.0 out of 10.0 in each of the subject's assessment systems.

If plagiarism is detected in any of the submitted activities, the grade will be 0 and the activity will be failed in the ordinary exam session. Late submission of activities is not allowed (they will be graded as "0"), except in duly justified cases. These activities must be retaken in the extraordinary exam session, where the same regulations will apply.

Finally, in order to pass the course in the ordinary exam session, a minimum of 50% class attendance is required. Absence certificates do not eliminate such absences under any circumstances.

According to the internal regulations of the Faculty of Health Sciences, in the case of theoretical or practical classes designated as mandatory by the instructor in the subject's schedules, students must record 90% attendance, whether the absence is justified or not. Failure to provide proof through the means established by the University will entitle the professor to grade the course as failed in the ordinary exam session, in accordance with the grading system.

The European University of Valencia establishes continuous assessment as the system for evaluating the knowledge, skills, and basic, general, transversal, and specific competences of the "Bachelor's Degree in Physiotherapy," in accordance with the Evaluation Regulations for Undergraduate Degrees. In this respect, and regarding the consumption of exam sessions, the student must be aware that if they participate in any of the assessment systems included in the Learning Guide during the ordinary session, they will receive an overall grade for the course, thereby consuming that exam session.

7.2. Second exam period

To pass the course in the extraordinary exam session, you must obtain a grade greater than or equal to 5.0 out of 10.0 in each of the course's assessment systems.

Activities not passed in the ordinary exam session must be submitted after receiving the corresponding corrections from the instructor, as well as any activities that were not previously submitted.

The European University of Valencia establishes continuous assessment as the system for evaluating the knowledge, skills, and the basic, general, transversal, and specific competences of the "Bachelor's Degree in Physiotherapy," in accordance with the Evaluation Regulations for Undergraduate Degrees. In this regard, and concerning the consumption of exam sessions, the student must be aware that in the extraordinary session it will be the Objective Knowledge Test (POC) that determines whether or not the exam session is consumed. In the exceptional case that the student only has pending assessment system(s) other than the POC, they will be considered "NP" (Not Presented) if they do not complete them, and will receive a numerical grade if they submit at least one of them.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

ASSESSABLE ACTIVITIES	DEADLINE
Learning Portfolio (GROUP WORK: SCIENTIFIC REPORT ABOUT TREATMENT MODALITIES)	4th week of November 2025
Learning Portfolio (INDIVIDUAL ASSIGNMENT: REFLECTIVE JOURNAL COMPLEX SIMULATION)	4th week of October 2025
PRACTICAL KNOWLEDGE TEST	Regular call: 1st - 2nd week of December 2025
THEORETICAL KNOWLEDGE TEST	Regular call: 1st-2nd week of January 2026 Extraordinary call: 1st-2nd week of June 2026

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The reference works for the follow-up of the subject are:

- Butler, D. S. (2000). *The sensitive nervous system*. Noigroup publications.
- Chaitow, S., & Fritz, S. (2023). Evidence-Informed Muscle Energy Techniques in the Biopsychosocial Framework. *Chaitow's Muscle Energy Techniques E-Book: Chaitow's Muscle Energy Techniques E-Book*, 1.
- Cook, C. (2013). *Orthopedic manual therapy*. Pearson Higher Ed.
- Donatelli, R. A. (2011). *Physical therapy of the shoulder*. Elsevier Health Sciences.
- Garrido, F. V., & Munoz, F. M. (2015). *Advanced Techniques in Musculoskeletal Medicine and Physiotherapy: Using Minimally Invasive Therapies in Practice*. Elsevier Health Sciences.
- Jull, G., Moore, A., Falla, D., Lewis, J., McCarthy, C., & Sterling, M. (2015). *Grieve's modern musculoskeletal physiotherapy*. Elsevier.
- Muscolino, J. E. (2014). *Atlas de músculos, huesos y referencias óseas: Fijaciones acciones y palpacionesl*. Paidotribo.
- Wise, C. H., & Gulick, D. T. (2009). *Mobilization notes: a rehabilitation specialist's pocket guide*. FA Davis.

The following is a recommended bibliography:

- Cleland, J., Koppenhaver, S., & Su, J. (2022). Netter. Exploración clínica en ortopedia: Un enfoque basado en la evidencia. Elsevier Health Sciences.
- Gilroy, A. M., MacPherson, B. R., Ross, L. M., Schünke, M., Schulte, E., & Schumacher, U. (2022). *Prometheus: Atlas de anatomía*. Médica Panamericana.
- Magee, D. J. (2014). *Orthopedic physical assessment-E-Book*. Elsevier Health Sciences.

- Mulligan, B. R. (2019). *Manual Therapy:" nags"," snags"," mwms" Etc*. Orthopedic Physical Therapy & Rehabilitation.
- Girbés, L. E., & Cubas, L. C. (2019). Pattern recognition of clinical syndromes related to neuromusculoskeletal pain disorders. Zerapi.

The instructors of the course will also supplement the bibliography with recent scientific articles relevant to the course content.

10. EDUCATIONAL GUIDANCE, DIVERSITY, AND INCLUSION UNIT

The Educational Guidance, Diversity, and Inclusion Unit (ODI) offers support to students throughout their university journey to help them achieve academic success. Other pillars of our work include supporting students with specific educational support needs, ensuring universal accessibility across all university campuses, and promoting equal opportunities.

The Unit offers students the following services:

1. Guidance and follow-up through personalized advising and academic improvement plans for students who need to enhance their academic performance.
2. In the area of diversity support, non-significant curricular adaptations (i.e., in teaching methodology and assessment) are provided for students with specific educational support needs, in order to ensure equity of opportunity.
3. Access to extracurricular training resources aimed at developing a wide range of skills to enrich students' personal and professional development.
4. Vocational guidance through tools and counseling for students with doubts about their career path or who believe they may have made the wrong degree choice.

Students requiring educational support can contact us at:
orientacioneducativa.uev@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.