



Information about the subject

Degree: Bachelor of Science Degree in Physiotherapy

Faculty: Faculty of Medicine and Health Sciences

Code: 240321 **Name:** Manual Therapy

Credits: 6,00 **ECTS Year:** 3 **Semester:** 2

Module: MODULE 5: UNIVERSITY-SPECIFIC

Subject Matter: Training in physiotherapeutic techniques **Type:** Compulsory

Field of knowledge: Health Sciences

Department: Physiotherapy

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

MODULE 5: UNIVERSITY-SPECIFIC

Subject Matter	ECTS	Subject	ECTS	Year/semester
Social Sciences	6,00	Science, Reason and Faith	6,00	2/1
Health Research and Documentation	6,00	Health Research and Documentation	6,00	3/2
Training in complementary techniques	6,00	Radiology	6,00	2/2
Training in physiotherapeutic techniques	30,00	Geriatric Physiotherapy	6,00	4/1
		Manual Therapy	6,00	3/2
		Paediatric Physiotherapy	6,00	3/2
		Preventive and Evolutionary Physiotherapy	6,00	3/2
		Special Procedures in Physiotherapy	6,00	3/2



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 The student is able to differentiate between the anatomical structures through palpation by means of orthopaedic and functional assessments of the patient.
- R2 The student understands the basic conceptual principles of manual therapy from the biological, psychological and social components produced in patients.
- R3 Knows the basic principles of traumatological, rheumatological and orthopaedic pathology of the spine.
- R4 Argues the aetiopathology of pain and apply manual therapy techniques in accordance with the neurophysiological approach to pain.
- R5 Knows the basic principles of the most common traumatological, rheumatological and orthopaedic pathology of the upper and lower limb.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB1	Students demonstrate knowledge and understanding in an area of study that is at the core of general secondary education, and is often at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.			X	
CB2	Students know how to apply their knowledge to their work or vocation in a professional way and possess the skills usually demonstrated by developing and defending arguments and solving problems within their area of study.				X
CB3	Students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific or ethical issues.				X
CB4	Students can convey information, ideas, problems and solutions to both specialized and non-specialized audiences.			X	
CB5	Students develop those learning skills necessary to undertake further studies with a high degree of autonomy.			X	

SPECIFIC		Weighting			
		1	2	3	4
CE1	Students learn human anatomy and physiology, highlighting the dynamic relations between structure and function, especially of the locomotive system and the nervous and cardio-respiratory systems.			X	
CE2	Students identify the physiological and structural changes that can occur as a result of the application of physiotherapy.			X	
CE3	Students identify the factors that influence human growth and development throughout life.			X	



CE4	Students know the principles and theories of physics, biomechanics, kinesiology and ergonomics, applicable to physiotherapy.	X
CE5	Students know the physical bases of the different physical agents and their applications in Physiotherapy.	X
CE7	Students know the application of ergonomic and anthropometric principles.	X
CE8	The psychological and social factors that influence the health/disease status of the individual, family and community.	X
CE9	Students assimilate theories of communication and interpersonal skills.	X
CE10	Learning theories to be applied in health education and in your own lifelong learning process	X
CE11	Students identify the factors involved in teamwork and leadership situations.	X
CE12	The general aspects of pathology of endogenous and exogenous etiology related to physiotherapy of all devices and systems with their medical, surgical, physiotherapeutic and orthopedic treatments.	X
CE13	The structural, physiological, functional and behavioral changes that occur as a result of the intervention of physiotherapy.	X
CE14	Students identify the theoretical bases of Physiotherapy as a science and profession. The models of action in Physiotherapy. The theoretical bases of the assessments, tests and functional verifications: knowledge of their modalities and techniques as well as the scientific evaluation of their utility and effectiveness. The diagnosis of Physiotherapy. Methodology of the research applied to Physiotherapy.	X
CE15	General physiotherapeutic procedures: Kinesitherapy, Massage and Massage Therapy, Electrotherapy, Magnetic Therapy, Ergotherapy, Hydrotherapy, Balneotherapy, Climatotherapy, Thalassotherapy; Thermotherapy, Cryotherapy, Vibrotherapy, Phototherapy, Pressotherapy, and the derivatives of other physical agents	X
CE16	Physiotherapeutic Procedures based on specific Methods and Techniques of physiotherapeutic actions to be applied in the different pathologies of all the apparatuses and systems, and in all the specialties of Medicine and Surgery, as well as in the promotion and conservation of the health, and in the prevention of the disease.	X
CE18	Students resort to theories that support problem-solving capacity and clinical reasoning.	X



CE22	Students evidence the fundamental concepts of health, health systems and levels of care. Epidemiology. Physiotherapy in the health-disease process.	X		
CE28	Students prepare and systematically fill in the complete Physiotherapy Clinical History, where all the steps followed from the reception of the patient/user to the report at the discharge of Physiotherapy are properly and efficiently recorded.		X	
CE29	Students assess the functional state of the patient/user, considering the physical, psychological and social aspects.		X	
CE30	Students determine the Physiotherapy Diagnosis according to the internationally recognized standards and international validation instruments. This competency includes prioritizing the needs of the patient/user to attend with priority to those that most compromise the recovery process.	X		
CE31	Students know how to design the Physiotherapy Intervention Plan. To elaborate a specific Physiotherapy Intervention Plan using problem-solving skills and clinical reasoning: in line with the available resources; formulating the intervention objectives with the user and, if appropriate, with the significant people in his environment, collecting his expectations regarding care; selecting the protocols or procedures most appropriate to the planned care, attending to criteria of appropriateness, validity and efficiency.		X	
CE32	Students execute, direct and coordinate the Physiotherapy Intervention Plan, attending to the principle of the user's individuality and using the therapeutic tools typical of Physiotherapy, that is, the set of methods, procedures, actions and techniques that through the application of physical means: cure, recover, enable, rehabilitate, adapt and readapt people with deficiencies, functional limitations, disabilities and handicaps; prevent diseases and promote health to people who want to maintain an optimum level of health.			X
CE33	Students evaluate the evolution of the results obtained with the Physiotherapy treatment in relation to the objectives set and the established results criteria. To do this it will be necessary: to define and establish the results criteria; to carry out the evaluation of the evolution of the patient/user; to redesign the objectives according to the evaluation, if necessary; and to adapt the intervention or treatment plan to the new objectives, if necessary.		X	



CE34	Students prepare the report upon discharge from Physiotherapy. When it is considered that the proposed objectives have been met, either because the process has been cured or because the possibilities of recovery with the therapeutic measures available have been exhausted, discharge from Physiotherapy will be proposed and the relevant report will be drawn up				X
CE35	Students provide a Physiotherapy attention in an effective way, giving an integral assistance to the patients/users, for which it will be necessary: To interpret the medical prescriptions; to prepare the environment in which the Physiotherapy attention will be carried out so that it is comfortable; to keep the patient informed of the treatment that is applied, explaining him/her the tests and maneuvers that are practiced, the preparation that they require, and to exhort him/her to collaborate at all times; to register daily the application of the Physiotherapy attention, the evolution and the incidents of it.				X
CE36	Students participate in the areas of health promotion and disease prevention. This includes, among others: identifying the social and economic factors that influence health and health care; designing and carrying out disease prevention and health promotion activities; advising on the development and implementation of care and education policies in the field of physiotherapy; identifying risks and risk factors; assessing and selecting users who can benefit from preventive measures; providing health education to the population in the various fields.			X	
CE37	Students relate effectively with the whole multidisciplinary team. This includes: establishing the objectives of Physiotherapy within the team; collecting, listening and assessing the reflections of the rest of the multidisciplinary team towards their actions; accepting and respecting the diversity of criteria of the rest of the team members; recognizing the competences, skills and knowledge of the rest of the health professionals.				X
CE41	Students keep the foundations of the knowledge, skills and attitudes of the professional competences updated, through a process of continuous training (throughout life); to critically analyse the methods, protocols and treatments of the care in Physiotherapy and to ensure that they are adapted to the evolution of scientific knowledge.				X
CE44	Students cope with stress, which involves the ability to control oneself and one's environment in stressful situations.				X



CE46	Motivate others. This means having the ability to generate in others the desire to actively and enthusiastically participate in any project or task.				X
CE47	Students maintain an attitude of learning and improvement. This includes expressing interest and acting in a constant search for information and professional improvement, committing to contribute to professional development in order to improve practice competence and maintain the status that corresponds to a qualified and regulated profession.			X	
CE48	Students manifest a high degree of self-concept, with optimal self-acceptance, without self-centeredness but without prejudices.				X
CE49	Students conform to the limits of their professional competence in health care.				X
CE50	Students collaborate and cooperate with other professionals, enriching each other This includes: resolving most situations by establishing direct and assertive communication and seeking consensus; assisting other health professionals in professional practice; knowing interprofessional boundaries and employing appropriate referral procedures.				X
CE51	Show respect, appreciation and sensitivity to the work of others.				X
CE52	Develop the ability to organize and lead work teams effectively and efficiently.			X	
CE54	Work responsibly, which means being able to cope with the activities of your job without the need for strict supervision.				X
CE55	Show its orientation towards the patient/user, making it clear in its actions that the citizen and his/her needs are the axis around which its decisions revolve. As can be seen, some of the competencies that we have gathered as specific coincide in their denomination and contents with certain transversal competencies, but we have decided to incorporate them as specific competencies, given the extraordinary importance that national and international Professional Associations and Colleges confer on them				X

TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Decision-making			X	



CT2	Problem solving.				X
CT3	Capacity for organization and planning.				X
CT4	Analysis and synthesis capacity.				X
CT5	Oral and written communication in the native language.				X
CT6	Information management capacity.			X	
CT7	Computer skills related to the field of study.		X		
CT8	Knowledge of a foreign language.			X	
CT9	Ethical commitment.				X
CT10	Teamwork.				X
CT11	Interpersonal relationship skills.				X
CT12	Work in an interdisciplinary team				X
CT13	Critical Reasoning				X
CT14	Work in an international context.			X	
CT15	Recognition of diversity and multiculturalism		X		
CT16	Motivation for quality				X
CT17	Adaptation to new situations.				X
CT18	Creativity				X
CT19	Autonomous learning				X
CT20	Initiative and entrepreneurship			X	
CT21	Leadership.			X	



CT22 Knowledge of other cultures and customs

x

CT23 Sensitivity to environmental issues.

x



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	0,00%	OPEN QUESTIONS: Written exam in which theoretical knowledge and the student's ability to relate, integrate and express it coherently in written language are evaluated. It allows the following generic or transversal skills to be assessed: 4 Capacity for analysis and synthesis. 3 Capacity for organisation and planning. 5 Oral and written communication in the native language. 8 Knowledge of a foreign language. 2 Problem-solving 19 Autonomous learning.
R2, R3, R5	40,00%	TEST TYPE: Multiple choice test with one correct answer out of five possible ones. It allows the student to know in greater detail the contents acquired by him/her. It allows the following generic or transversal competences to be assessed: 2 Problem solving 1 Decision making 13 Critical thinking
R1, R2, R4	10,00%	WORKS: The student, individually or in a group, elaborates a revision or research topic and presents it, in writing, for the evaluation by the teacher. The following generic or transversal competences are valued: 4 Capacity for analysis and synthesis. 3 Capacity for organisation and planning. 7 Computer skills. 6 Information management skills. 10 Teamwork. 14 Working in an international context. 11 Interpersonal skills. 13 Critical thinking. 19 Autonomous learning. 18 Creativity. 21 Leadership. 20 Initiative and entrepreneurship. 16 Motivation for Quality. 70 Maintaining an attitude of learning and improvement. 72 Knowing one's own skills and limitations.



	0,00%	PRACTICAL EXAM: The student is faced with a test in which s/he must demonstrate through practical application the acquisition of certain knowledge. For example, histological or anatomopathological diagnosis, image interpretation or diagnostic tests. This test evaluates the following generic or transversal skills: 13 Critical reasoning. 19 Autonomous learning.
R1, R2, R3, R4, R5	50,00%	STUDY AND RESOLUTION OF CASES

Observations

The practices are in person and mandatory. The student needs 75% attendance in practical classes to be evaluated. In the case of not achieving the minimum attendance, it will be presented directly in the theoretical exam of the second call.

Membership in group S does not exempt from mandatory attendance at practices and seminars. It will be necessary to obtain a 5 in the multiple choice test to have access to the practical evaluation test in the first and second calls.

In-person attendance on the day of the seminars where the presentation of the works will be presented is mandatory to obtain the corresponding grade percentage. The grade will be Pass or Fail as long as the student meets the minimum requirements. The requirements will be complete attendance at the seminars, the defense and presentation of a topic related to manual therapy and participation as a listener in them.

In order to obtain the average grade in case resolution, it will be necessary to obtain more than a 4 in said evaluation system.

The date of the seminars will be agreed on the first day of class. COMPLETE non-attendance must be justified. If not, the grade will be NOT APPROVED.

THE MANUAL THERAPY SUBJECT PRESENTS A CONTINUOUS EVALUATION SYSTEM.
TEST TYPE TEST: AN INITIAL LEVEL TEST WILL BE CARRIED OUT WITH A VALUE OF 5% AND A TEST AT THE END OF THE SEMESTER WHICH WILL CORRESPOND TO 35% OF THE FINAL GRADE.

THE SEMINARS WILL BE CARRIED OUT IN THE MIDDLE OF THE SEMESTER AND WILL RECALL 10% OF THE FINAL GRADE.

AS A FINAL EVALUATION SYSTEM, A STUDY AND RESOLUTION OF CASES WILL BE CARRIED OUT WHERE STUDENTS WILL BE EVALUATED FROM A THEORETICAL-PRACTICAL PERSPECTIVE WITH A TOTAL OF 50% OF THE NUMERICAL GRADE OF THE SUBJECT



MENTION OF DISTINCTION:

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Master class Problem solving Exposition of contents by the teacher. Explanation of knowledge and skills
- M2 Case resolution: Analysis of sample realities - real or simulated - that allow the student to connect theory with practice, to learn from models of reality or to reflect on the processes used in the cases presented.
- M4 Personalized attention. Period of instruction and/or guidance by a tutor with the aim of analyzing with the student their work, activities and their evolution in learning the subjects.
- M5 Set of tests carried out to know the degree of acquisition of knowledge and skills of the student.
- M7 Discussion and problem solving.
- M11 Oral presentation
- M12 Group work: Group work sessions supervised by the teacher. Knowledge construction through student interaction and activity.
- M14 Group work to search, discuss and filter information about the subjects



- M15 Seminar, supervised monographic sessions with shared participation
- M16 Student's study: Individual preparation of readings, essays, problem solving, seminars.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons M1	R1, R2, R3, R4, R5	36,00	1,44
Practice lessons M2, M7	R1, R2, R3, R4, R5	13,00	0,52
Seminar M4, M7, M11, M15	R1, R2, R3, R4, R5	4,00	0,16
Office Hours M4	R1, R2, R3, R4, R5	3,00	0,12
Assessment M5, M16	R1, R2, R3, R4, R5	4,00	0,16
TOTAL		60,00	2,40

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work M16	R1, R2, R5	60,00	2,40
Group work M12, M14	R1, R2, R5	30,00	1,20
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Introduction to manual therapy	The actuality of manual therapy within the biopsychosocial model.
Manual therapy and pain	Basic principles of manual therapy
Physiology manual therapy and pain	Neurophysiology of manual therapy
Manual Therapy and Placebo	Effect Placebo effect and manual therapy
Schools and techniques of manual therapy	Concepts and different perspectives of manual therapy
Pelvis and Pubis	Manual therapy iliosacral joint
Lumbar and Sacral	Lumbar spine and sacroiliac joint manual therapy
Lower Limb Manual Therapy	Manual therapy hip, knee, ankle and foot
Manual Therapy Upper Limb	Manual therapy shoulder girdle, shoulder, elbow, wrist and hand
Cervical and Thoracic Manual Therapy	Manual therapy cervical and thoracic spine and rib grill.
Seminars	Defense of manual therapy work associated with the most important pathologies
Evaluation and tutorials	Theoretical and practical evaluation



Theoretical and Practical

4 Sessions where each student assimilates previous and acquired concepts before the development of the practice. Generally evaluation, differential diagnosis in physiotherapy and assessment of the neuro-musculoskeletal system. 1-Coxal-Pubis and Chronic Low Back Pain 2- Lumbar-Sacral and Radiculopathy 3-Cervical and Thoracic 4-Upper limb

Practice

5 Sessions where each student develops their own practical learning of the subject's treatment techniques 1-Coxal-Pubis and Chronic Low Back Pain 2- Lumbar-Sacral and Radiculopathy 3-Cervical and Thoracic 4-Upper limb 5-Lower Member



Temporary organization of learning:

Block of content	Number of sessions	Hours
Introduction to manual therapy	2,00	4,00
Manual therapy and pain	2,00	4,00
Physiology manual therapy and pain	2,00	4,00
Manual Therapy and Placebo	1,00	2,00
Schools and techniques of manual therapy	2,00	4,00
Pelvis and Pubis	4,00	8,00
Lumbar and Sacral	4,00	8,00
Lower Limb Manual Therapy	2,00	4,00
Manual Therapy Upper Limb	4,00	8,00
Cervical and Thoracic Manual Therapy	4,00	8,00
Seminars	2,00	4,00
Evaluation and tutorials	1,00	2,00
Theoretical and Practical		0,00
Practice		0,00



References

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