



Information about the subject

Degree: Bachelor of Science Degree in Physiotherapy

Faculty: Faculty of Medicine and Health Sciences

Code: 240207 **Name:** Kinesitherapy

Credits: 6,00 **ECTS Year:** 2 **Semester:** 1

Module: MODULE 2: SPECIFIC

Subject Matter: Kinesitherapy **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 2: SPECIFIC

Subject Matter	ECTS	Subject	ECTS	Year/semester
Fundamentals of Physical Therapy	6,00	Fundamentals of Physiotherapy	6,00	1/1
Assessment in Physiotherapy	6,00	Assessment in Physiotherapy	6,00	1/2
General Procedures for Intervention in Physiotherapy	12,00	General Procedures of Intervention I	6,00	2/1
		General Procedures of Intervention II	6,00	2/2
Physiotherapy in clinical specialties	6,00	Medical-Surgical Conditions and their Treatments	6,00	2/2
Specific Methods of Intervention in Physical Therapy	30,00	Cardiocirculatory and Respiratory Physiotherapy	6,00	3/1
		Physiotherapy of the Locomotive System I	6,00	2/2
		Physiotherapy of the Locomotive system II	6,00	3/1
		Physiotherapy of the Nervous System	6,00	2/2
		Sports Physiotherapy	6,00	3/1
Kinesitherapy	6,00	Kinesitherapy	6,00	2/1
Legislation, Public Health and Health Administration	12,00	Community Physiotherapy and Public Health	6,00	3/1



Legislation, Public
Health and Health
Administration

Social Morality. Ethics

6,00

4/1

Recommended knowledge

No recommended prior knowledge is required.

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 Construct a passive treatment programme through mobilisation for each patient. Modify each treatment according to the patient's needs without losing its initial purpose.
- R2 Communicate and correct each patient appropriately in relation to the predetermined treatment.
- R3 Performs a physical therapy intervention according to the patient's muscular balance and condition.
- R4 Knows, in a theoretical way, the techniques and methods of kinesitherapeutic treatment, knowing the effects and consequences that can derive from their performance .
- R5 The student is capable of integrating and adapting kinesitherapeutic techniques within comprehensive physiotherapy treatment.
- R6 Carry out their professional work in coordination with a multidisciplinary team.
- R7 The student is able to express orally and give justified arguments and explanations of his/her therapeutic actions and treatment plans.



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	
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
CE4	Students know the principles and theories of physics, biomechanics, kinesiology and ergonomics, applicable to physiotherapy.				X
CE7	Students know the application of ergonomic and anthropometric principles.				X



CE9	Students assimilate theories of communication and interpersonal skills.	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
CE18	Students resort to theories that support problem-solving capacity and clinical reasoning.		X	
CE29	Students assess the functional state of the patient/user, considering the physical, psychological and social aspects.			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
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



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
R1, R3, R4, R5, R6	15,00%	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.
R1, R3, R4, R5, R6	25,00%	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, R3, R4, R5, R6, R7	5,00%	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.



R1, R2, R3, R5, R7	50,00%	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.
	5,00%	ATTENDANCE AND PARTICIPATION IN CLASS: The teacher evaluates the participation, involvement and progression of the student's acquisition of knowledge and skills during the theoretical and practical classes. It will not exceed 5% of the final grade.

Observations

USE OF AI

Students may use AI for personal study of the subject. Students may not use AI for assessable assignments, unless required in a specific activity and indicated by the instructor. If AI is used in any activity, the specific part of the activity, the AI tool used, and the purpose for which it was used must be stated.

1. Final theoretical test - 40% of the total:

The theoretical evaluation will be carried out at the end of the course, through a final theoretical test and will consist of two parts:

40 objective multiple-choice questions (multi-choice type) whose value will be 60% of the theoretical exam grade. Questions with 5 possible answers and are corrected with the following formula: For every 4 errors, 1 correct question will be subtracted. $\text{Note} = \text{Successes} - \frac{\text{Errors}}{4}$
5 short answer questions whose value will be 40% of the theoretical exam grade. The minimum score to pass the written test will be 5 out of 10, having passed both parts. Obtain a minimum of 30% in the multiple response section and 20% in the short answer section.

2. Classroom activities (Continuous evaluation) - 5% of the total:

With the intention of promoting the student's progressive study and continuous evaluation, an activity will be carried out in the middle of the theoretical syllabus to evaluate the knowledge that the students have acquired. The evaluated syllabus will not be eliminatory to the final exam.

This activity favors the student's learning, as well as their progressive study of the subject.

This activity will have an impact on the grade of the subject with a maximum of 5% of the final grade.

3. Group activities - 5% of the total:

Group work will be carried out (3 students) in which they must make a video where they carry out the mobilizations that have been assigned to them. In this video they must execute and explain the different mobilizations as they have been reproduced in class by the teacher. This work will be part



of the study material for the practical exam.

This activity favors the student's learning, as well as their progressive study of the subject.

This activity will have an impact on the grade of the subject with a maximum of 5% of the final grade.

4. Practical evaluation - 50% of the total:

The practical test will consist of the resolution and execution of 2 practical kinesitherapy questions learned in class.

Each of them will be valued with 50% of the grade for the practical part. The 2 questions must be approved to pass the practical exam.

The following are aspects that can be evaluated using a rubric:

Correct selection of the techniques to apply according to the objectives

Speed in resolving the issue raised

Patient position

Physiotherapist position

Correct placement of hands or instruments

Explanation simultaneous to execution with appropriate and correct language.

Correction in technical execution

Correct adaptation of the technique to the patient's capabilities and characteristics.

An essential requirement to take the exam for this practical exam is to have previously approved the theoretical part (minimum grade of 5 out of 10). And have attended 90% of the practical classes (only 1 absence is allowed). Otherwise, students will not have the option to take the practical exam and will go directly to the 2nd call.

EVALUATION CRITERIA:

To pass the subject it will be mandatory:

Pass the global theoretical test in each of its sections (Pass the open questions section and multiple choice section separately). Students who do not pass it will not have the option to take the practical test.

Passing is considered a minimum grade of 5 out of 10 (a minimum of 2 in the open questions section and a minimum of 3 in the multiple choice section).

Have the theoretical and practical parts approved to average.

Presentation of the work and that it is suitable.

Attendance at theoretical classes is not mandatory.

While attendance at practical classes is mandatory, allowing only one justified absence. Anyone who does not meet this criterion will not be able to take the exam and will be suspended, having to take the 2nd call.

Just as failure to present the work will also mean failure in the 1st call, not being able to take the theoretical exam and having to go directly to the 2nd call.

2nd CALL:

The theoretical exam grade is not saved for the second call. Having to examine both the theoretical part and the practical part.

Yes, the work note is saved.



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.
- 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
- M16 Student's study: Individual preparation of readings, essays, problem solving, seminars.



IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons M1	R1, R3, R4, R6	26,00	1,04
Practice lessons M12	R1, R2, R3, R4, R5, R7	24,00	0,96
Office Hours M4	R1, R2, R3, R4, R5, R6, R7	7,00	0,28
Assessment M5	R1, R2, R3, R4, R5, R6, R7	3,00	0,12
TOTAL		60,00	2,40

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Autonomous work M12, M16	R1, R2, R3, R4, R5, R6, R7	80,00	3,20
Group work M12	R1, R2, R3, R4, R5, R6, R7	10,00	0,40
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block

Contents

UNIT 1: BASES OF KINESITHERAPY

UNIT 1. - Introduction to kinesitherapy
UNIT 2. - Physical and mechanical principles of movement
UNIT 6. - Principles of anthropometry
UNIT 7. - Akinesia

UNIT 2: PASSIVE KINESITERAPY

UNIT 3. - Passive manual kinesitherapy and self-assisted
UNIT 4. - Manipulations and joint tractions

UNIT 3: ACTIVE KINESITHERAPY

UNIT 5. - Principles of assisted, free and resisted active mobility
UNIT 8. - Kinetic muscle chains

UNIT 4: STRETCHING AND MUSCLE STRENGTHENING

UNIT 9. - Stretching
UNIT 10. - Muscle strengthening

UNIT 5: SPECIAL PATHOLOGIES

UNIT 11. - Specific pathology exercises
UNIT 12. - Therapeutic exercise
UNIT 13. - Resolution of cases

TUTORING AND EVALUATION

TUTORING AND EVALUATION



BLOCK OF PRACTICAL CONTENTS

- UNIT 1. Back palpatory anatomy and MMSS
- UNIT 2. Spine Kinesitherapy
- UNIT 3. Shoulder Kinesitherapy
- UNIT 4. Elbow Kinesitherapy
- UNIT 5. Wrist and Hand Kinesitherapy
- UNIT 6. MMSS Resisted Mobilizations
- UNIT 7. MMII palpatory anatomy
- UNIT 8. Hip Kinesitherapy
- UNIT 9. Kinesitherapy Knee
- UNIT 10. Kinesitherapy Ankle and foot
- UNIT 11. MMII Resisted Mobilizations
- UNIT 12. Exam test

Temporary organization of learning:

Block of content	Number of sessions	Hours
UNIT 1: BASES OF KINESITHERAPY	4,00	8,00
UNIT 2: PASSIVE KINESITHERAPY	2,00	4,00
UNIT 3: ACTIVE KINESITHERAPY	2,00	4,00
UNIT 4: STRETCHING AND MUSCLE STRENGTHENING	2,00	4,00
UNIT 5: SPECIAL PATHOLOGIES	3,00	6,00
TUTORING AND EVALUATION	5,00	10,00
BLOCK OF PRACTICAL CONTENTS	12,00	24,00



References

-Calais-Germain B, Samuel J. Anatomy for movement: Introduction to the analysis of body techniques. Print Dumas; 1988. 301 p.-Kapandji AI, Kapandji IA. Articular physiology 5 Ed. T.1: Upper limb. Pan American Medical; 1998. 298 p.-Kapandji AI. Articular Physiology: Hip, Knee, Ankle, Foot, Plantar Arch, Gait. Editorial Medica Panamericana Sa de; 2010. 329 p.-Martín JMC, Camacho CI, Rojo JMI, Díaz EM, Vega CA de. General Physiotherapy: Kinesitherapy. Synthesis; 1996. 424 p.-Génot C, Neiger H, Dufour M, Péninou G, Dupré JM. Kinesitherapy. Panamerican Medical Ed; 2000. 636 p.-Kottke FJ, Lehmann JF. Physical medicine and rehabilitation. Editorial Médica Panamericana; 1993. 1365 p.-Fernández De Las Peñas C, Melián Ortíz, A. Kinesitherapy: Physiological bases and practical application. Ed. Elsevier; 2019. 202 p.-Xhardez Y. Vademecum of Kinesioterapia and functional reeducation: techniques, pathology and treatment indications. The Athenaeum; 2002. 989 p.-Lippert, L. S., & Román, P. G. C .. CLINICAL ANATOMY AND KINESIOLOGY. Paidotribo. (2013)