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: -

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	Cardiocirculary 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 kinesitherapic treatment, knowing the effects and consequences that can derive from their performance.
R5	The student is capable of integrating and adapting kinesitherapic 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

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

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
R1, R3, R4, R5, R6	18,00%	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	27,00%	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.

Observations

Evaluation criteria:
To pass the course it will be mandatory:
- Pass the global theoretical test in each of its sections (Pass the open questions section and the multiple-choice section separately). Students who do not pass it will not have the option to take the practical test.- A pass 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).- To pass the theoretical and practical parts in order to average.- Presentation of the work and that it is approved.
Attendance to theoretical classes is not compulsory, although it will be taken into account, as well as the participation and good attitude in them.
While attendance to practical classes is compulsory, only one justified absence is allowed. Those who do not comply with this criterion will not be allowed to take the exam and will be suspended, and will have to take the 2nd exam.
1. Theoretical evaluation:
Final theoretical test
The theoretical evaluation will be carried out at the end of the course, through a final theoretical test and will consist of two parts:
1st. 40 multiple-choice objective questions (multiple-choice) whose value will be 60% of the grade of the theoretical exam. Questions with 5 possible answers and corrected with the following formula:- Every 4 errors, 1 correct question will be subtracted.- Grade = Correct - Errors K - 1
2nd. 5 short answer questions whose value will be 40% of the grade of the theoretical exam.
The minimum grade to pass the written test will be 5 out of 10, having passed both parts. Obtain a minimum of 30% in the multiple-choice section and 20% in the short answer section.

Exercises, tests and activities in the classroom or at home.
With the intention of favoring the progressive study of the student and the continuous evaluation, various activities such as practical demonstrations, reading articles, solving clinical cases, answering questionnaires, making schemes and concept maps, answering questionnaires from the e-learning platform through the Internet, small partial theoretical tests, which will not eliminate material, etc. will be carried out.
Activities that will favor the student's learning, as well as his progressive study of the subject, as well as two group works.
These activities will have repercussion in the grade of the subject with a 10% of the final grade.

2. Practical evaluation:
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 of the practical part. The 2 questions must be passed in order to pass the practical exam.
These aspects can be evaluated by means of a rubric:
- Correct selection of the techniques to be applied according to the objectives.- Speed in the resolution of the question posed.- Patient position- Position of the physiotherapist- Correct positioning of hands or instruments- Simultaneous explanation to the execution with an appropriate and correct language.- Correctness in the technical execution- Correct adaptation of the technique to the patient's capabilities and characteristics.
It is an indispensable requirement to take this practical exam, is to have previously passed the theoretical part (minimum grade of 5 out of 10). And to have attended 90% of the practical classes. Otherwise, students will not have the option to take the practical exam and will pass directly to the 2nd round.

3. 2nd call:
Neither the theoretical nor the practical grade will be saved for the second call. Both the theoretical and the practical part will have to be examined.
The grade of the work will be saved.

MENTION OF DISTINCTION:
According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 (“Sobresaliente”). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

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 KINESITERAPY	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)

Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

[X] Microsoft Teams

[ ] Kaltura

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

X	Microsoft Teams
	Kaltura

Explanation about the practical sessions:

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

[X] The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

[ ] The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: