



## (\*Facultade de Fisioterapia

### (\*Presentación

(\*)  
As guías docentes recollen información relevante das materias que compoñen o plan de estudos do Grao en Fisioterapia.

### (\*Equipo Decanal Centro e Directivo dos Departamentos

(\*)  
**EQUIPO DECANAL DO CENTRO:**

**Decana:** M<sup>a</sup> Mercedes Soto González  
Teléfono: 986 80 17 51 ou 986 80 17 52  
Correo: m.soto@uvigo.es

**Vicedecana:** Iria Da Cuña Carrera  
Teléfono: 986 80 17 53 ou 986 80 17 52  
Correo: iriadc@uvigo.es

**Secretaria:** M<sup>a</sup> del Rocío Abalo Núñez  
Teléfono: 986 80 17 54 ou 986 80 17 52  
Correo: rocioabalo@uvigo.es

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Teléfono: 986 812646

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Correo: xncedou05@uvigo.es

Teléfono: 988 387108

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Teléfono: 988 387145

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Correo: udhumanidades@uvigo.es

Teléfono: 986 813799

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### **(\*)Páxina web**

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<http://fisioterapia.uvigo.es/>

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### **(\*)Localización**

<b>Subjects</b>			
<b>Year 3rd</b>			
Code	Name	Quadmester	Total Cr.
P05G171V01301	Manual Therapy in Neuromotor Disorders	1st	9
P05G171V01302	Cardiorespiratory Physical Therapy	1st	9
P05G171V01303	English for health sciences	1st	6
P05G171V01304	Physical therapy in sport and physical activity	1st	6
P05G171V01305	Pilates applied in physiotherapy	1st	6
P05G171V01306	Physical Therapy in Urogynecology and Obstetrics	1st	6
P05G171V01307	Physical Therapy in Pediatrics	1st	6
P05G171V01308	Physical therapy in clinical specialties I	2nd	9
P05G171V01309	Physical therapy in clinical specialties II	2nd	9
P05G171V01310	Physiotherapy in lymphedema	2nd	6
P05G171V01311	Physical Therapy for Differently-Abled People	2nd	6
P05G171V01312	Cardiac rehabilitation	2nd	6
P05G171V01313	Occupational Physical Therapy and Ergonomics	2nd	6
P05G171V01314	Cranio-Cervical Mandibular Physical Therapy	2nd	6

**IDENTIFYING DATA****Manual Therapy in Neuromotor Disorders**

Subject	Manual Therapy in Neuromotor Disorders			
Code	P05G171V01301			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	9	Mandatory	3rd	1st
Teaching language	#EnglishFriendly Spanish Galician			
Department				
Coordinator	Machado de Oliveira, Iris			
Lecturers	González González, Yoana Machado de Oliveira, Iris Monge Pereira, Esther			
E-mail	irismacoli@uvigo.es			
Web				
General description	This is a subject given in the first term of the third year of the degree in physiotherapy where tackle theoretical and practical contents about methods of treatment and strategies of assessment in neuromotor alterations.			
	Subject of the English Friendly program. International students may request teachers: a) materials and references bibliographies for monitoring the subject in English, b) attend tutoring in English, c) tests and assessments in English.			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.
C7	Know the physiological and structural changes that can occur as a result of the application of physiotherapy.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C15	Understand ergonomic and anthropometric principles.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C35	To know and understand the sciences, models, techniques and instruments on which physiotherapy is based, articulated and developed.
D3	Recognition of diversity and multiculturalism
D7	Maintain an attitude of learning and improvement.
D8	Ability to understand the meaning and application of the gender perspective in different areas of knowledge and professional practice with the aim of achieving a more just and egalitarian society.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
To know and describe the basic principles of operation of the nervous and muscular systems.	A2	B3	C35	D7
To know and describe the biomechanics principles involved in the neuromotor alterations.	A2	B3	C35	D7
To describe the physiological principles of the proprioceptive system and apply different forms of intervention in alterations of the proprioceptive system.	A2	B3	C15 C35	D7
To know, execute and register the assessment of patients with neuromotor disorders.	A2	B3	C7 C13 C15	D3 D7

To appoint and apply therapeutic techniques for the treatment of neuromotor conditions.	A2	B3	C15 C19 C20	D3 D7
To relate the physiological and therapeutic bases of different methods of physiotherapy used in the treatment of neuromotor disorders.	A2	B3		D7
To make, expose and defend, in a group, a work on a theme related to the contents of the subject.	A2	B1 B3	C15 C20	D7 D8

## Contents

Topic	
Principles of the functioning of the nervous and muscular system.	To deepen the principles of the functioning of the nervous system, both central and peripheral, and its interrelation with the musculoskeletal system.
Biomechanical principles in neuromotor disorders.	To deepen into typical biomechanical patterns of functional movement and how alterations in these patterns can lead to different neuromotor disorders.
Methods of assessment of neuromotor disorders.	To explain and apply the main tools for the evaluation of sensitivity and movement in patients with some type of neuromotor disorder in order to allow the approach of the intervention and also the monitoring of the evolution of the pathology.
Physical therapy methods in the treatment of neuromotor disorders.	Explain and apply different treatment methods in physiotherapy, with different basic approaches, but focused on neuromotor disorders of different etiologies.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	24	44	68
Laboratory practical	45	55	100
Mentored work	2	10	12
Essay questions exam	1	20	21
Simulation or Role Playing	1	20	21
Essay	0	2	2

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	The subject coordinator will explain the points to be taken into account regarding the syllabus and the teachers responsible for it, the form of evaluation to be carried out, and how the theoretical and practical classes of the subject will be structured, as well as the group work to be done. It will be explained the proposed schedule of classes to be carried out during the four-month period and the dates of the exams. Finally, it will explain the teaching obligations of the students for the development of the subject.
Lecturing	Theoretical classes will combine lectures with theoretical-participatory classes where student participation is encouraged and motivated. Activities may be established prior to the class and delivered through the virtual platform of the subject in Moovi for subsequent discussion during the lecture. In addition, problem-solving activities and collaborative work activities may be carried out during the classes. At the discretion of the teachers responsible for the different modules, discussion forums may be established in the subject's own space in the virtual teaching platform Moovi.
Laboratory practical	A demonstrative methodology will be followed, seeking the integration of theoretical knowledge into practice. Students will perform the practice, being corrected by the teacher and clarifying any doubts that may arise. In addition, there will be case studies and debates related to the subject matter of the classes.
Mentored work	Development of a theoretical/practical work on a topic related to the contents of the subject. The work groups will be determined by subject at the beginning of the term by the subject coordinator. The work will consist of a first part where a review of the scientific literature on the agreed topic will be made and a second part where an explanatory video of the technique or valuation tool that is the subject of the topic of the work will be made and a written work with the results of the first part of the work will also be presented. Each member of the group will be individually monitored as the grades will be established individually. The deadlines for the delivery of the work and presentation will be published at the beginning of the term in the virtual platform of the subject in Moovi.

## Personalized assistance

Methodologies	Description
Lecturing	Personalized attention will be focused on solving any doubts regarding the theoretical syllabus that students may have and guide their efforts in the subject. This can be done in person or remotely through Campus Remoto in the virtual office of each professor of the subject.
Laboratory practical	Personalized attention will be focused on solving any doubts that the students may have regarding the practical and to guide their efforts in the subject. This can be done in person or remotely through Campus Remoto in the virtual office of each professor of the subject.
Mentored work	Personalized attention will be focused on solving doubts, guiding the work to be done in the subject, and keeping a record and assessing what has been done by the students in the same group. the subject, and to keep a record and evaluate what has been done by the students of the same group and also individually for each member. individually for each member. This can be done in person or remotely through Campus Remoto in the virtual office of each professor of the subject.

### Assessment

Description	Qualification	Training and Learning Results
Essay questions exam	40	A2 B3 C15 D7 C35
Simulation or Role Playing	40	A2 B3 C7 D3 C13 D7 C15 C19 C20
Essay	20	A2 B1 C15 D7 B3 C20 D8

### Other comments on the Evaluation

To pass the subject the student must have passed each part separately (exam of development questions, simulation or Role Playing and work). Students who do not pass the subject in the ordinary exam will keep the part passed for the 2nd opportunity exam within the same academic year.

#### Continuous evaluation:

It is the evaluation established by default and that is described in the evaluation section of the subject with their respective percentages.

#### Global evaluation:

The student may request the waiver of the continuous evaluation by informing the coordinator of the subject within the established period. In this case, he/she will be evaluated by the global evaluation procedure. The global evaluation of the subject includes exactly the same sections as the continuous evaluation.

#### Second chance evaluation:

The second opportunity evaluation includes the same sections as the continuous evaluation, with the difference that, the work, in case of not having it passed in group modality, will be done in individual modality following the guidelines established by the subject coordinator.

#### Other comments:

The failing grade will never be higher than 4.5. Therefore, it could be the case that a student obtains in the global evaluation, taking into account the percentages of the evaluation tests, a grade of 5 out of 10 or higher; however, if the student has failed any of the parts of the evaluation, the grade in the global evaluation will be a fail.

Students who do not wish to follow the continuous evaluation must notify in writing following the procedure established by the Faculty of Physiotherapy. The waiver to the continuous evaluation must be made before the 5th week of teaching, which means that the student will assume the global evaluation established in the subject. Once the continuous evaluation has been waived, the student will not be entitled to it, nor to the considerations established therein.

### Sources of information

## Basic Bibliography

Shumway-Cook, **CONTROL MOTOR DE LA INVESTIGACION A LA PRACTICA CLINICA: De la investigación a la práctica clínica**, 2019

Kisner et al, **Therapeutic Exercises: foundations and techniques**, 2018

Cano de la Cuerda, **Nuevas tecnologías en neurorrehabilitación: aplicaciones diagnósticas y terapéuticas**, 2018

## Complementary Bibliography

Souchard, **Reeducación postural global**, 2022

Gelener et al, **Proprioception and Clinical Correlation**, 2021

Dunleavy & Slowik, **Therapeutic Exercise Prescription**, 2019

Sánchez-Rodríguez et al, **APPS En Nerorrehabilitación**, 2016

Cano de la Cuerda, **Neurorrehabilitación: métodos específicos de valoración y tratamiento**, 2012

Downie, **Neurología para fisioterapeutas**, 2001

Alamer et al, **Effect of Ankle Joint Mobilization with Movement on Range of Motion, Balance and Gait Function in Chronic Stroke Survivors: Systematic Review of Randomized Controlled Trials**, 2021

Reid et al, **Adding mobilisation with movement to exercise and advice hastens the improvement in range, pain and function after non-operative cast immobilisation for distal radius fracture**, 2021

Pourahmadi et al, **Effectiveness of Proprioceptive Neuromuscular Facilitation on Pain Intensity and Functional Disability in Patients with Low Back Pain: A Systematic Review and Meta-Analysis**, 2020

Weerasekara et al, **Effect of Mobilisation with Movement (MWM) on clinical outcomes in lateral ankle sprains: A systematic review and meta-analysis**, 2020

Delhaye et al, **Neural Basis of Touch and Proprioception in Primate Cortex**, 2019

Bastos et al, **Proprioceptive Neuromuscular Facilitation: A Physiotherapeutic Concept with Excellent Clinical Results but Little Explored in its Potential in Scientific Research**, 2018

Chaturvedi et al, **Proprioceptive neuromuscular facilitation (PNF) vs. task specific training in acute stroke: the effects on neuroplasticity**, 2018

Tuthill & Azim, **Proprioception**, 2018

Sharma & Kaur, **Effect of core strengthening with pelvic proprioceptive neuromuscular facilitation on trunk, balance, gait, and function in chronic stroke**, 2017

Yildirim et al, **Comparison of effects of static, proprioceptive neuromuscular facilitation and Mulligan stretching on hip flexion range of motion: a randomized controlled trial**, 2016

Behm et al, **Acute effects of muscle stretching on physical performance, range of motion, and injury incidence in healthy active individuals: a systematic review**, 2015

## Recommendations

### Subjects that continue the syllabus

Physical therapy in clinical specialties I/P05G171V01308

Physical therapy in clinical specialties II/P05G171V01309

### Subjects that it is recommended to have taken before

Human anatomy: Human anatomy/P05G171V01101

Physiology: Human physiology/P05G171V01102

Physiology: Functional movement in physiotherapy/P05G171V01105

Human anatomy: Medical conditions/P05G171V01201

Human anatomy: Surgical conditions/P05G171V01202

Kinesitherapy/P05G171V01203

**IDENTIFYING DATA****Cardiorespiratory Physical Therapy**

Subject	Cardiorespiratory Physical Therapy			
Code	P05G171V01302			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	9	Mandatory	3rd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Lantarón Caeiro, Eva María			
Lecturers	Lantarón Caeiro, Eva María Mollinedo Cardalda, Irímia			
E-mail	evalantaron@uvigo.es			
Web				
General description				

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B2	Incorporate the ethical and legal principles of the profession into professional practice and integrate social and community aspects into decision making.
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.
C1	To know the principles and theories of physical agents and their applications in physical therapy.
C7	Know the physiological and structural changes that can occur as a result of the application of physiotherapy.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C14	Understand and apply the manual and instrumental methods and procedures of assessment in Physical Therapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.
C18	Encourage the participation of the user and family in their recovery process.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
D4	Creativity, entrepreneurial spirit and adaptation to new situations.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
New		B3		
New			C7	
New	A2	B3	C1	
			C7	
			C9	
			C14	
New	A2	B2	C1	
			C7	
			C9	
			C18	
			C19	
			C20	
New	A2	B2	C14	D4
		B3	C19	
			C20	



<b>Contents</b>	
Topic	
THEORETICAL SYLLABUS -	(*)-
Introduction to Respiratory Physiotherapy -	(*)-
Assessment of the respiratory patient	(*)-
Methods and techniques of cardiorespiratory physiotherapy -	- Techniques of airway permeabilization - Ventilatory reeducation techniques - Therapeutic exercise in cardiorespiratory pathology.
PRACTICAL SYLLABUS	(*)-
Assessment of the respiratory patient	- Physical assessment of the respiratory patient. - Assessment of respiratory sounds. - Functional respiratory examination at rest. - Functional respiratory examination during exercise.
Cardiorespiratory physiotherapy methods and techniques	- Airway patency techniques. - Ventilatory reeducation techniques - Therapeutic exercise in cardiorespiratory pathology.

<b>Planning</b>			
	Class hours	Hours outside the classroom	Total hours
Lecturing	32	59	91
Laboratory practical	43	75	118
Essay questions exam	1	0	1
Laboratory practice	1	0	1
Portfolio / dossier	3	11	14

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

<b>Methodologies</b>	
	Description
Lecturing	The following teaching methodologies will be used in the master classes:  - Introductory activities - Problem solving - Case studies and presentations - Debate - Discussion forums - Collaborative learning
Laboratory practical	In the laboratory practices will be carried out the practices related to the contents of the subject encouraging the resolution of problems in an autonomous way as well as the debate and case studies.

<b>Personalized assistance</b>	
Methodologies	Description
Lecturing	Students may request tutorials in person, by remote campus or via e-mail. Students may request tutorials in person, by remote campus or via e-mail.
Laboratory practical	Students may request tutorials in person, by remote campus or via e-mail.

<b>Assessment</b>			
	Description	Qualification	Training and Learning Results
Essay questions exam	None may be left unanswered.	35	A2 B2 C1 B3 C7 C9 C18 C19 C20

Laboratory practice	A practical exam - Role play where the student answers in a practical way to 2 - 3 assumptions. These practical cases are chosen at random by the student within the set of assessment methods and treatment techniques that were made throughout the course. A list will be drawn up in due time with the examination schedule of each student enrolled in the subject. In order to take the practical exam, the student must first take the theoretical exam.	35	A2	B2 B3	C14 C19 C20	D4
Portfolio / dossier	The student will elaborate 3 dossiers, with a value of 10% of the grade each one. 1.- Complete evaluation of a respiratory patient. 2.- Treatment protocols using permeabilization techniques - Clinical case. 3.- Cardiorespiratory Exercise.	30	A2	B3	C1 C20	D4

### Other comments on the Evaluation

All the questions of the exams must have an effective answer.

-CONTINUOUS EVALUATION: In the continuous evaluation modality the evaluation percentages are: -Theoretical exam (total 35%):-Practical Exam (Simulation or Role Playing): 35% (In order to take the practical exam the student must take the theoretical exam).-Portfolio/dossier: 3 portfolio documents with a value of 10% each. Of obligatory character.

To pass the subject the student must: obtain at least a 5 out of 10 in the theoretical exam and practical exam. (Both in the theoretical and practical exam, all the questions of the exams must have an effective answer). The overall grade of the course must be higher than 5 considering the different evaluation percentages. The written tests may include multiple-choice exercises, true/false exercises, element matching exercises, sentence completion exercises, response exercises with a specific term, resolution of clinical cases or interpretation of an image/graph, as well as other activities that have been developed throughout the course. Likewise, concepts of different topics can be evaluated in the same statement to check the assimilation of contents by the students.

GLOBAL EVALUATION (waiver of continuous evaluation):In the global evaluation modality the evaluation percentages are: -Theoretical exam (total 50%):-Practical Exam (Simulation or Role Playing): 50% (In order to take the practical exam the student must take the theoretical exam).

To pass the subject the student must: obtain at least a 5 out of 10 in the theoretical exam and practical exam. (In both the theoretical and practical exam, all the questions of the exams must have an effective answer). The overall grade of the course must be higher than 5 considering the different evaluation percentages. Students who do not wish to follow the continuous evaluation must notify in writing following the procedure established by the Faculty of Physiotherapy. The waiver to the continuous evaluation must be made in the 5th week of teaching, which means that the student will assume the global evaluation established in the subject. Once the continuous evaluation has been waived, the student will not be entitled to it, nor to the considerations established in it. In order to take the practical exam, the student must take the theoretical exam.

-EXTRAORDINARY EVALUATION- RECOVERY: In the recovery evaluation the same percentages are maintained as in the global evaluation. In addition, the same minimum requirements to pass the subject are maintained. To pass the subject the student must pass the theory exam and the practical exam (In order to take the practical exam the student must take the theory exam).All the questions of the exams must have an effective answer.In case of passing the theoretical tests, or the practical exam, the grade is preserved in the recovery call.

Other considerations: Regardless of the average grade obtained in the evaluation tests if the minimum requirements previously exposed are not met the grade obtained will be SUSPENDED. The failing grade will never be higher than 4.5. In all the calls and modalities to be able to take the practical exam must first take the theoretical exam. Therefore, it could be the case that a student obtains in the global evaluation, taking into account the percentages of the evaluation tests, a grade of 5 out of 10 or higher; however, if the student has failed some of the evaluation tests, the grade in the global evaluation will be a fail. The evaluation systems described in this Teaching Guide are sensitive both to the evaluation of the competences and to the contents of the subject. In order to take the practical exam, the student must take the theoretical exam.The presence of spelling mistakes in papers or written tests can lead to a failing grade. The Teaching Guide will follow the REGULATIONS ON THE ASSESSMENT, GRADING AND QUALIFICATION OF THE TEACHING AND LEARNING PROCESS OF STUDENTS,Approved at the April 18, 2023, as well as the specific adaptations for the Degree in Physiotherapy determined by the Xunta de Centro.

### Sources of information

#### Basic Bibliography

Seco J, **Sistema Respiratorio Métodos, fisioterapia clínica y afecciones para fisioterapeutas,**, Panamericana, 2018

West JB, Luks Andrew M, **Fisiopatología pulmonar. Fundamentos,**, 9ª, Wolters Kluwer, 2017

Giménez,M. , Servera, E., Vergara,, **Prevención y Rehabilitación en Patología Respiratoria Crónica. Fisioterapia, entrenamiento y cuidados respiratorios.**, 2ª, Médica Panamericana., 2004

Pleguezuelos,E; Miranda G; Gómez, A; Capellas L, **Rehabilitación integral en el paciente con enfermedad pulmonar obstructiva crónica,** Panamericana, 2008

#### Complementary Bibliography

Postiaux G, **Fisioterapia respiratoria en el niño,** McGraw-Hill/Interamericana de España, 1999

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**Recommendations**

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**Subjects that continue the syllabus**

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Physical therapy in clinical specialties I/P05G171V01308

Physical therapy in clinical specialties II/P05G171V01309

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**Subjects that it is recommended to have taken before**

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Human anatomy: Medical-surgical conditions/P05G171V01107

Human anatomy: Human anatomy/P05G171V01101

Human anatomy: Medical conditions/P05G171V01201

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**IDENTIFYING DATA****English for health sciences**

Subject	English for health sciences			
Code	P05G171V01303			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	1st
Teaching language	English			
Department				
Coordinator	García de la Puerta, Marta			
Lecturers	García de la Puerta, Marta			
E-mail	mpuerta@uvigo.es			
Web				
General description	<p>English for Health Sciences is a course for future physiotherapists who need to communicate with patients in English. The course focuses on the language and communication skills that physiotherapists need to make consultations more effective.</p> <p>It also provides ample opportunities for students to build awareness and practice the language in simulated and real-life scenarios. To this end, this course teaches learners how to handle a range of situations such as receiving the patient, taking a patient history, examining a patient and describing treatment options, etc.</p> <p>Its integrated communicative skills approach develops the student's self-confidence to survive and succeed in professional encounters within an English-speaking global community.</p>			

**Training and Learning Results**

Code				
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.			
A5	Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.			
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.			
B2	Incorporate the ethical and legal principles of the profession into professional practice and integrate social and community aspects into decision making.			
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.			
B4	Acquire basic scientific training in research.			
C4	To know and develop the theory of communication and interpersonal skills.			
C33	Integrate all knowledge, skills, abilities, attitudes and values acquired in all subjects, developing all professional competences and qualifying for an effective physiotherapy care with the realization of pre-professional internships in the form of independent clinical rotation and with a final evaluation of competences in health centers, hospitals and other health care centers.			
D2	Computer skills related to the field of study			
D3	Recognition of diversity and multiculturalism			
D4	Creativity, entrepreneurial spirit and adaptation to new situations.			
D5	Developing leadership and organizational skills.			

**Expected results from this subject**

Expected results from this subject	Training and Learning Results				
New	A2	B3	C4	D2	
	A5	B4		D4	
New	A2	B1	C4	D2	
		B2		D3	
		B3		D4	
		B4		D5	
New	A2	B1	C4	D2	
		B2		C33	D3
		B3			D4
		B4			D5

**Contents**

Topic	
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0. Introduction to communication.	Understanding how good communication benefits the patient interview.  Recognising the different elements that make up communication (verbal communication, non-verbal communication, cultural awareness, etc.).
	Facts and Figures.
1. Receiving the patient.	Greeting patients and putting them at ease; introducing yourself and your role; asking the opening question and setting the agenda for the interview.
2. The Presenting Complaint.	Encouraging patients to express themselves in their own words; taking an accurate history of the presenting complaint; asking about intensity and degree of pain; using techniques such as facilitation, repetition and clarification.
3. Taking past medical history and family history.	Giving results. Planning treatment and closing the interview. Dealing with sensitive issues. Breaking bad news.
4. Examining a patient.	Preparing and reassuring the patient during an examination; explaining examination procedures; giving instructions in a patient-friendly manner.
5. Giving results.	Explaining results in a way that patients can understand and remember. Encouraging patients to express their fears and concerns. Explaining medical terminology to a patient. Giving prognosis.
6. Planning treatment and closing the interview.	Explaining treatments to a patient; discussing options; describing benefits; advising on lifestyle; negotiating treatment; closing the interview.
7. Dealing with sensitive issues.	Broaching sensitive issues without bias and remaining non-judgemental; reading and responding to patient cues; employing question techniques: CAGE.
8. Writing Skills for the Health Professional.	Medical spelling. Writing a patient note. Standard medical abbreviations.
9. Professional Presentations.	Delivering impactful and effective presentations. Structuring a presentation. Using signposting language for linking the parts. Illustrating the importance of body language and voice power to communicate your message clearly and persuasively.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Seminars	22	47	69
Project based learning	21	44	65
Problem and/or exercise solving	1	4	5
Objective questions exam	1	4	5
Laboratory practice	1	4	5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	The objective introductory activities is to provide general guidance on the subject: objectives, contents, methodology, assessment criteria, etc.  Students will take a needs analysis survey to gather information about the language student's needs, goals and preferences and to assess their English language proficiency.
Seminars	The primary objective is to enhance students' overall English language skills, including listening, speaking, reading, and writing, specifically in the context of health sciences. This involves improving pronunciation, vocabulary, grammar, and fluency to effectively communicate with patients, colleagues, and healthcare professionals in English-speaking environments.  The use of Information Technology (IT) in class (online resources, language learning apps, virtual learning platform, e.g. MooVi, etc.) can greatly enhance the learning experience and provide students with opportunities to engage with the language in dynamic and interactive ways.
Project based learning	PBL classes provide students with opportunities to engage in real-world projects that are meaningful, engaging and aligned with the curriculum. Projects are designed to mirror real-life situations, allowing students to apply their knowledge and skills to tackle complex problems or challenges. It encourages multidisciplinary Integration: Projects can span across different subjects, allowing students to see the connections between various topics and apply knowledge and skills from different areas.

## Personalized assistance

Methodologies	Description
Project based learning	Tutorials will be focused on solving any doubts students may have, guiding their efforts in the subject and increasing their motivation for learning.
Seminars	Tutorials will be focused on solving any doubts students may have, guiding their efforts in the subject and increasing their motivation for learning.

Assessment						
	Description	Qualification	Training and Learning Results			
Problem and/or exercise solving	This activity seeks to help students with the practical exercises related to the communicative skills and the linguistic skills and their application for the learning and acquisition of the theoretical contents of the subject.	30	A2	B1	D2	
			A5	B3	D3	
				B4	D4	
Objective questions exam	Language tests evaluate students' proficiency and understanding of the English language. These tests assess various language skills (reading, listening, writing, etc.). It could be a combination of multiple-choice questions, short answer questions, or a mix of different formats.	20	A2	B1	C4	D3
			A5	B2	D4	
				B3	D5	
				B4		
Laboratory practice	There are various tasks that can be assigned to students to enhance their language skills. These activities encourage the students to actively participate, engage in communication, and use the language in a practical context. For example, students will be assigned role plays, oral presentations or simulations where they can act out various scenarios in English. The teacher provides constructive feedback during the semester. These activities can be done independently or collaboratively.	50	A2	B2	C4	D2
				B3	D3	
				B4	D4	
	The percentage is calculated as follows:					
	- Oral presentation: 25%					
	- Role play: 25%					

### Other comments on the Evaluation

#### 1. Particular considerations

There are two assessment systems: continuous or global (overall assessment). The selection of a system excludes the other.

**1.1 Continuous assessment** To qualify for the system of continuous evaluation, students are required to attend 80% of the total lecture hours with academic progress and participation. Students not reaching that percentage will lose this option. The assignments and tests done during the course will be worth 100% of the final assessment for those students choosing the continuous evaluation. Then non-completion of the assignments requested during the course will be counted as zero (0.0). The assignments must be delivered or submitted by the deadlines and dates set in advance.

**1.2 Global assessment (non-attendants)** Students who do not wish to follow the continuous assessment must notify in writing following the procedure established by the Faculty of Physiotherapy. The waiver of continuous assessment must be made in the 5th week of teaching, which means that the student will assume the global assessment established in the subject. Once the continuous assessment has been waived, the student will not be entitled to it, nor to the considerations established therein. Students choosing the global examination will have to take a final overall exam that will take place on the official date established by the Physiotherapy School. To this end, students should consult the school's website, where the examination date and time are specified.

**2. Subject's final grade** 2.1 Continuous assessment The final mark for this subject is calculated as follows:

1) 30% - active participation in class discussions, group work, regular completion and submission of in-class and out-of class assignments, including listening comprehension exercises, written exercises, reading comprehension tasks, and vocabulary practice.

2) 20% - objective questions exams. These tests evaluate student's proficiency and understanding of the English language explored in class. These tests assess various language skills (reading comprehension, listening comprehension, writing, etc.), vocabulary, use of English, etc. It could be a combination of multiple-choice questions, short answer questions, etc. or a mix of different formats.

3) 50% - Students will be assigned two final tasks: role play (25%) and an oral presentation (25%).

To pass the course through continuous assessment, it is necessary to obtain an average grade of 5 points with a minimum of 4 (out of 10) in each of the parts. If this is not the case, the final average grade of the subject will be truncated with a maximum grade of 4.5 (out of 10), even if the arithmetic average of the tests is higher.

To completely pass the course, students who obtained a mark below 4 in any of the parts on the first edition of records will have to resit the failed part(s) in an exam in July of the current academic year. If the exam is not passed in the second call, students will have to resit the exam of the whole course in future calls, except

for the next assessment call in September.

Continuous assessment will consider not only the relevance and appropriateness of the content of the answers, but also their linguistic correctness.

Partial or total plagiarism in any of the assignments or activities will result in an automatic fail of the subject. To claim ignorance of what plagiarism is, will not exempt students of their responsibility in this regard.

## 2.2 Global assessment (non-attendants)

Students who waive their right to continuous assessment will have to take a final overall exam (100%) that will take place on the official examination established by the Physical Therapy School.

The exam will assess your writing and speaking skills and the content for each part is based on everyday work (physical therapist consultation) and health science tasks and skills.

The final assessment is calculated as follows:

1) A written exam (50%)

2) An oral exam (50%)

Both parts (theory and practice) will add up to 100%, being 5 (five) the required average mark to pass the subject, with a minimum of 4 (out of ten) in each of the parts. If this is not the case, the final average grade of the subject will be truncated with a maximum grade of 4.5 (out of 10), even if the arithmetic average of the tests is higher.

Regarding July's test, to completely pass the course, global assessment students who obtained a mark below 4 in any of the parts on the first edition of records will have to resit the exam of the whole course in future calls, including all the skills and linguistic contents of the subject.

Final assessment will consider not only the relevance and appropriateness of the content of the answers, but also their linguistic correctness.

Partial or total plagiarism in any of the assignments or activities will result in an automatic fail of the subject. To claim ignorance of what plagiarism is, will not exempt students of their responsibility in this regard.

**Ethical commitment:** Students are requested to have ethical behaviour. In case of detecting unethical behaviour (copying, plagiarism, use of non authorized electronic devices, and others), it will be considered that the student does not meet the requirements to pass the subject. In this case, the overall grade in the current academic year will be a fail (0.0).

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## Sources of information

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<http://www.englishclub.com/english-for-work/medical.htm>,

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## **Recommendations**

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### **Other comments**

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This course will start from B1 level (intermediate), according to the European Framework of Reference for Languages.

Please note that the Textbook which appears in the basic bibliography section, is compulsory.

Final assessment will consider not only the relevance and appropriateness of the content of the answers, but also their linguistic correctness.

During the examinations no dictionaries, notes or electronic devices (mobile phones, tablets, PCs, etc.) will be allowed.

All the above-mentioned comments also pertain to Erasmus students. In the event of not being able to access MooVi, students must contact the professor to solve the problem.

Students are requested to have ethical behaviour. In case of detecting an unethical behaviour (copying, plagiarism, use of not authorized electronic devices, and others), it will be considered that the student does not meet the requirements to pass the subject. In this case, the overall grade in the current academic year will be a fail (0.0).

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**IDENTIFYING DATA****Physical therapy in sport and physical activity**

Subject	Physical therapy in sport and physical activity			
Code	P05G171V01304			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Justo Cousiño, Lorenzo Antonio			
Lecturers	Justo Cousiño, Lorenzo Antonio			
E-mail	lorenzo.justo@uvigo.es			
Web				
General description	<p>(The Physiotherapy in Sport and Physical Activity subject, which aims to offer a broad vision of the performance of the physiotherapist within the field of sports and physical activity. The student will know aspects</p> <p>overviews of the role of the physiotherapist within the sports field (concept of Sports Physiotherapy, functions and general competences of the sports physiotherapist), the physiotherapy assessment of the athlete, the protective equipment and orthotics in sports, as well as the main injuries related to this field. Besides, From a theoretical-practical point of view, the student will know the main techniques for the prevention and treatment of sports injuries. It is intended that the student acquires the necessary strategies for the treatment and prevention of injuries within a field as relevant as Sports Physiotherapy.</p> <p>The Physiotherapy subject is optional and has a credit load of 6 ECTS credits. In this subject will provide basic knowledge on sports injuries and treatment techniques and prevention within the field of sports and physical activity.</p> <p>Focused on the area of sport, this subject will develop concepts previously addressed in the first courses of the degree such as: physiology, biomechanics, assessment, general physiotherapy and conditions medical. Likewise, new concepts and techniques will be introduced that students must incorporate as therapeutic arsenal that will be useful for the correct development of clinical stays in courses and in professional work at the end of the degree.</p>			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.
C7	Know the physiological and structural changes that can occur as a result of the application of physiotherapy.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C14	Understand and apply the manual and instrumental methods and procedures of assessment in Physical Therapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.
C15	Understand ergonomic and anthropometric principles.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C18	Encourage the participation of the user and family in their recovery process.
C36	To know and understand the methods, procedures and physiotherapeutic actions, aimed at both the actual therapy to be applied in the clinic for the reeducation or functional recovery, as well as the implementation of activities aimed at the promotion and maintenance of health.
C38	Intervene in the areas of health promotion, prevention, protection and recovery.
D1	Ability to communicate orally and in writing in Galician.
D3	Recognition of diversity and multiculturalism
D7	Maintain an attitude of learning and improvement.
D8	Ability to understand the meaning and application of the gender perspective in different areas of knowledge and professional practice with the aim of achieving a more just and egalitarian society.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
-	A2		C9 C15 C18 C36	D1 D3
-	A2		C7 C9 C13 C14 C15 C16 C36	D1 D7
-	A2	B3	C7 C9 C13 C14 C15 C16 C18 C36 C38	D1 D7
-	A2		C7 C9 C13 C14 C15 C36	D1 D7
-	A2		C7 C9 C13 C14 C15 C36	D1 D7
-	A2		C7 C9 C13 C14 C15 C18 C36 C38	D1 D7
-	A2		C7 C9 C13 C14 C15 C16 C36	D1 D7
-	A2	B3	C7 C9 C13 C14 C15 C16 C18 C36 C38	D1 D3 D7 D8

**Contents**

Topic

-Generalities of Physical Therapy in Physical Activity and Sport.  
 -Role of the physiotherapist in the reincorporation to sports practice.  
 -Sports injuries: Concept and prevention.  
 -General treatment of sports injuries and Therapeutic exercise.

-Techniques and approaches from physiotherapy for the rehabilitation of the athlete.

-Application of bandages in Sports Physiotherapy.

Physiological response and adaptation to physical physical exercise and sport

-Basic principles of musculoskeletal ultrasound.

-Evaluation of the athlete and the general population for the prescription of therapeutic therapeutic exercise

(\*)Lesións deportivas: Concepto e prevención. (\*)-

(\*)Tratamento xeral das lesións deportivas e exercicio terapéutico. Abordaxe a pé de campo. Técnicas e abordaxes desde a fisioterapia para a rehabilitación do deportista.

(\*)Aplicación de vendaxes en Fisioterapia Deportiva. (\*)-

(\*)Resposta e adaptación fisiolóxica ao exercicio físico e ao deporte (\*)-

(\*)Principios básicos de ecografía músculo-esquelética (\*)-

(\*)Avaliación do deportista e da poboación xeral para a prescrición de exercicio terapéutico (\*)-

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	23	65	88
Mentored work	0	6	6
Laboratory practical	16	35	51
Essay questions exam	1	0	1
Essay	0	1	1
Simulation or Role Playing	1	0	1
Objective questions exam	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	-
Lecturing	-
Mentored work	-
Laboratory practical	-

## Personalized assistance

Methodologies	Description
Lecturing	-
Mentored work	-
Laboratory practical	-

## Assessment

Description	Qualification	Training and Learning Results				
		A2	B3	C7	D1	
Essay questions exam	20			C9	D7	
				C13		
				C36		
				C38		
Essay	20	A2	B3	C7	D1	
				C9	D7	
				C13		
				C14		
				C15		
				C16		
				C18		
				C36		
				C38		
Simulation or Role Playing	40	A2	B3	C7	D1	
				C9	D3	
				C13	D7	
				C14	D8	
				C15		
				C16		
				C18		
				C36		
Objective questions exam	20	A2	B3	C7	D1	
				C9	D7	
				C13		
				C36		
				C38		

### Other comments on the Evaluation

#### -CONTINUOUS EVALUATION:

In the continuous evaluation modality the evaluation percentages are:

-Written tests (total 40%): exam of objective questions (eliminatory): 20% and exam of development questions: 20%.

-Work: 20%. Compulsory.

- Practical Exam (Simulation or Role Playing): 40%.

To pass the subject the student must: obtain at least a 5 out of 10 in the theoretical exam (both the exam of objective questions and development questions) and pass independently the exam of objective questions, must pass the work (obtain at least a 5 out of 10), must pass the practical exam (obtain at least a 5 out of 10) and the overall grade of the subject must be higher than 5 considering the different evaluation percentages.

The written tests (objective test and long answer test) may include multiple response exercises, true/false exercises, element matching exercises, sentence completion exercises, response exercises with a specific term, resolution of clinical cases or interpretation of an image/graphic, as well as other activities that have been developed throughout the course. Likewise, concepts from different topics can be evaluated in the same statement to check the assimilation of contents by the students. The objective test will have the corresponding penalty in the wrong answers.

The realization of the work is obligatory.

#### -GLOBAL EVALUATION (waiver of continuous evaluation):

Due to the characteristics of the subject and the distribution of the evaluation percentages, in the global evaluation modality the same evaluation percentages and the same criteria to pass the subject are maintained.

Students who do not wish to follow the continuous evaluation must notify in writing following the procedure established by the Faculty of Physiotherapy. The waiver to the continuous evaluation must be made in the 5th week of teaching, which means that the student will assume the global evaluation established in the subject. Once the continuous evaluation has

been waived, the student will not be entitled to it, nor to the considerations established therein.

### **-EXTRAORDINARY EVALUATION -RECOVERY:**

In the recovery evaluation the same percentages are maintained as in continuous and global evaluation. In addition, the same minimum requirements to pass the subject are maintained.

In case of failing the written exam in the ordinary exam (or only the objective questions) all the written tests must be repeated: Exam of objective questions (eliminatory): 20% and Exam of development questions: 20%. In order to pass the subject, the objective questions exam must be passed and the overall grade of the exam must be 5 out of 10.

In case of passing the theoretical tests, the practical exam or the work, the grade will be preserved in the recovery call.

In case of not passing the work must perform the work again according to the criteria specified for this call.

### **Other considerations:**

Regardless of the average grade obtained in the evaluation tests, if the minimum requirements previously exposed are not met, the grade obtained will be SUSPENDED.

The failing grade will never be higher than 4.5.

In all the calls and modalities to be able to take the practical exam must first take the theoretical exam.

Therefore, it could be the case that a student obtains in the global evaluation, taking into account the percentages of the evaluation tests, a grade of 5 out of 10 or higher; however, if the student has failed some of the evaluation tests, the grade in the global evaluation will be a fail.

The evaluation systems described in this Teaching Guide are sensitive both to the evaluation of the competences and to the contents of the subject.

The presence of spelling mistakes in papers or written tests may lead to a failing grade.

The Teaching Guide will follow the "REGULAMENTO SOBRE A AVALIACIÓN, A CALIFICACIÓN E A CALIDADE DA DOCENCIA E DO PROCESO DE APRENDIZAXE DO ESTUDANTADO" (Aprobado no claustro do 18 de abril de 2023), as well as the specific adaptations for the Degree in Physiotherapy determined in Xunta de Centro.

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## **Recommendations**

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### **Subjects that are recommended to be taken simultaneously**

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Physical therapy in clinical specialties II/P05G171V01309

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### **Subjects that it is recommended to have taken before**

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Human anatomy: Human anatomy/P05G171V01101

Physiology: Functional movement in physiotherapy/P05G171V01105

Physiotherapy evaluation/P05G171V01108

Human anatomy: Medical conditions/P05G171V01201

General physiotherapy I/P05G171V01204

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**IDENTIFYING DATA****Pilates applied in physiotherapy**

Subject	Pilates applied in physiotherapy			
Code	P05G171V01305			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Rodríguez Fuentes, Gustavo			
Lecturers	Rodríguez Fuentes, Gustavo			
E-mail	gfuentes@uvigo.es			
Web	<a href="http://gfuentes.webs.uvigo.es/index.htm">http://gfuentes.webs.uvigo.es/index.htm</a>			
General description	<p>This subject is an optional subject in the third year of the Physiotherapy Degree (taught in the first four-month period). It studies the therapeutic use of the Pilates method in Physiotherapy. Due to its contents, it is important to have previous knowledge about the anatomy of the musculoskeletal apparatus, applied biomechanics and medical-surgical pathology.</p> <p>On the other hand, its place within the degree course serves at the same time to increase the students' therapeutic arsenal available to treat patients, an activity that will be carried out in the subject "Clinical Stays", in the fourth year.</p>			

**Training and Learning Results**

Code				
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.			
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.			
C2	Understand the principles of biomechanics and electrophysiology, and their main applications in the field of physical therapy.			
C4	To know and develop the theory of communication and interpersonal skills.			
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.			
C15	Understand ergonomic and anthropometric principles.			
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.			
C24	Promote healthy lifestyle habits through health education.			
C35	To know and understand the sciences, models, techniques and instruments on which physiotherapy is based, articulated and developed.			
D1	Ability to communicate orally and in writing in Galician.			
D4	Creativity, entrepreneurial spirit and adaptation to new situations.			
D7	Maintain an attitude of learning and improvement.			

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
New			C2 C15 C35	
New	A2	B3	C2 C4 C13 C15 C16 C24 C35	D1 D4
New	A2	B3	C2 C4 C15 C16 C35	D1 D4

New	A2		C2 C15 C24 C35	
New	A2	B3	C2 C4 C13 C15 C16 C24 C35	D1 D4 D7

## Contents

Topic	
History of the Pilates method	- The figure of Joseph H. Pilates. - Pilates in Spain. - What is Pilates?
Basis of the Pilates method	- Basic principles. - Anatomy and biomechanics. - Posture analysis. - Tools that facilitate movement.
Equipment used in the Pilates method	- Machines. - Accessory equipment.
Development of the Pilates method in Physiotherapy	- Principles of exercise progression. - Programming of a class. - Indications and precautions of the Pilates method. - Safety measures when handling the material.
Pilates exercises	- On the mat. - On machines.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	2	0	2
Lecturing	9	14	23
Collaborative Learning	9	18	27
Laboratory practical	24	48	72
Mentored work	2	20	22
Portfolio / dossier	1	0	1
Essay	2	0	2
Simulation or Role Playing	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	They will have the purpose of conveying the objectives of the subject, detailing the contents that will be worked on and how it will be done, and clarify the evaluation criteria to be followed.
Lecturing	Theoretical-participative classes where the active participation of students will be encouraged and which will introduce and facilitate the different activities that make up collaborative learning. Generic use of audiovisual media. Information will be provided through the Moovi e-learning platform.
Collaborative Learning	Within the theoretical classes and in relation to the lectures of the teaching staff, a collaborative learning methodology will be developed. a collaborative learning methodology will be developed, where the different subjects will be covered through small group activities activities carried out in small groups, facilitating the development of an active participation of the students in their own learning. Information will be provided through the Moovi e-learning platform.
Laboratory practical	The practices will follow a demonstrative methodology with a reasoned analysis of the exercises that make up the Pilates method. The teacher will explain and demonstrate how the different exercises are performed, so they will be guided practices where the integration is sought, not only of the theoretical knowledge of the subject, but also of the anatomical, biomechanical and pathological knowledge that the students already possess. All the exercises will be presented in practice sheets, where part of the information will be given by the teacher of the subject, and the students will have to complete it. Information will be given through the Moovi e-learning platform.



Mentored work	The assignments will involve a fully active role on the part of the students and will be developed in groups (several groups will be formed within each practice group). The assignments will consist of to elaborate and teach a Pilates class focused either on a prevalent pathology in our society or on a population with specific physical-functional conditions. In addition, the groups must submit a report of the proposed class in which the main objectives of the session for that pathology or population are exposed, as well as the description of the exercises that make up the class and a video with the representation of the exercises that make up the class. Information will be provided through the Moovi e-learning platform. The teacher will play a guiding and support role in the process of developing the work in each group.
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### Personalized assistance

Methodologies	Description
Lecturing	Personalised attention will be focused on solving any doubts that students may have and on guiding their efforts in the subject. students and guiding their efforts in the subject. This personalised attention will be given both in person, during the official tutoring timetable, as well as by e-mail (indicating as the subject Tutoring).
Collaborative Learning	Personalised attention will be focused on the solution of any doubts that students may have in the in carrying out the different activities proposed and in the evidence to be presented.
Laboratory practical	Personalised attention will be focused on solving any doubts students may have and clarifying the evaluation rubric of the practical exam.
Mentored work	Personalised attention will basically be focused on solving doubts, guiding the work to be done in the subject, and keeping a record and assessing what the students have done.

### Assessment

	Description	Qualification	Training and Learning Results			
Portfolio / dossier	Attendance at a minimum of 80% of the classes is compulsory. Anyone who misses more than 4 hours of theory class, must pass the subject by means of a multiple-choice test described in "other comments on the evaluation". At the end of each class, or when it is established according to the activity carried out, the evidence of evidence of the work carried out during the class, or when established according to the activity carried out. the same. There will be 9 different activities and each of them will have a value between 0 and 0.3 points. 0.3 points and, as a minimum, each student must provide evidence of 7 of them. of them. Otherwise, they will have to take the final test. At the end of the theoretical classes, each student will have to hand in a evaluation document of the subject and of the work developed, as well as a self-evaluation of a self-evaluation of himself/herself. This document will contain at least the following sections following sections: degree of attendance to the theoretical classes, degree of compliance with the activities activities carried out, the two activities they liked the most and the two they liked the liked the most and the two they liked the least, recommendations for the future and personal self-evaluation (grade they think they deserve). This evaluation will have a value between 0 and 0.3 points.	30	A2	B3	C2	D1
Essay	The completion of the work is compulsory in order to pass the subject. It will be handed in on a computer support to the teaching staff or the MooVi teledocency platform ( <a href="https://moovi.uvigo.gal/">https://moovi.uvigo.gal/</a> ) will be used, uploading it to the space that the group will have in the same within the subject. Half of the mark for the work will correspond to the written report and the video delivered, and the other half will correspond to the class presented to the teacher and the classmates in the practical group.	40	A2	B3	C2	D1
Simulation or Role Playing	Examination where each student will lead 3 exercises (1 on machines and 2 on mat) in a practical way (10 minutes per exercise). The exercises will be chosen at random by the students themselves from the set of exercises done during the course. At the end of the Pilates classes on machines, a practical exam will be given for this part of the course (this question will be removed on the date that corresponds to it in May-June). All questions will be graded from 0 to 10 points.	30	A2	B3	C2	D1

### Other comments on the Evaluation

Students who do not pass the subject will keep the part passed for the second chance exam of the same academic year (**part passed means having a 5 out of 10 or more in each of the parts that make up the assessment**, which means, at least, having 1.5 points in the portfolio and the practical exam, and 2 points in the work). Those who do not fulfil the obligations indicated in the portfolio section will have to take a **quiz final exam**. Characteristics of the exam: 40 single-

choice questions (maximum duration of 1 hour); all questions will have the same value. To pass, the student will have to achieve at least 1.50 points (corresponding to a 5 on a scale of 0 to 10 points). Blank answers will not be deducted, but wrong answers will be deducted, as indicated in the following formula: Marks = [correct answers - (errors/no. options-1) / no. questions] - 10**Those who do not pass the essay** will have to do an individual essay in the 2nd opportunity exam, consisting of a class on a clinical case proposed by the teacher of the subject. This work will have a written part and an audiovisual part (2 points maximum in each of these parts), but not a public presentation.**In the event that the student does not pass each of the parts of the subject**, and even if the average gives a pass mark, he/she will fail the subject and a grade of 4.5 will be given in the transcript of records.The Teaching Guide follows the "Regulations on the evaluation, grading and quality of teaching and of the student learning process of the student learning process", approved by the Cloister of 18 April 2023, as well as the specific adaptations for the Degree in for the Degree in Physiotherapy determined by the Board of the Centre.

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## Sources of information

### Basic Bibliography

Calvo JB., **Pilates terapéutico. Para la rehabilitación del aparato locomotor.**, Médica Panamericana, 2012

Geweniger V, Bohlander A., **Manual de pilates: ejercicios con colchoneta y aparatos como forma de prevención y rehabilitación**, Paidotribo, 2016

Isacowitz R, Clippinger K., **Anatomía del pilates. Nueva edición ampliada y actualizada: Guía ilustrada para mejorar la estabilidad de core y mejorar el equilibrio**, Tutor, 2020

### Complementary Bibliography

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Kaplanek BA, Levine B, Jaffe WL., **Pilates y rehabilitación para síndromes y artroplastias**, Paidotribo, 2014

Merrithew LG., **Manual de ejercicios completos de Matwork**, Stott Pilates, 2006

Pilates JH., **Tu salud: un sistema de ejercicios que ha revolucionado el mundo de la educación física**, Presentation Dynamics, 1998

Pilates JH, Miller WJ., **Volver a la vida con la contrología de Pilates**, Presentation Dynamics, 1998

Richardson C, Hodges P, Hides J., **Therapeutic exercise for lumbopelvic stabilization. A motor control approach for the treatment and prevention of low back pain**, 2ª, Churchill Livingstone, 2004

Wood S., **Pilates para la rehabilitación: Recuperar lesiones y optimizar la estabilidad, la movilidad y la funcionalidad**, Tutor, 2019

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## Recommendations

### Subjects that are recommended to be taken simultaneously

Physical therapy in clinical specialties I/P05G171V01308

Physical therapy in clinical specialties II/P05G171V01309

### Subjects that it is recommended to have taken before

Human anatomy: Human anatomy/P05G171V01101

Physiology: Functional movement in physiotherapy/P05G171V01105

Physiotherapy evaluation/P05G171V01108

**IDENTIFYING DATA****Physical Therapy in Urogynecology and Obstetrics**

Subject	Physical Therapy in Urogynecology and Obstetrics			
Code	P05G171V01306			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	1st
Teaching language	Spanish Galician			
Department				
Coordinator	Alonso Calvete, Alejandra			
Lecturers	Alonso Calvete, Alejandra			
E-mail	alejalonso@uvigo.es			
Web	<a href="http://fisioterapia.uvigo.es/gl/">http://fisioterapia.uvigo.es/gl/</a>			
General description	The aim of this subject is for students to acquire the necessary knowledge and skills for the prevention and treatment of the different obstetric and urogynecology processes and pathologies.			

**Training and Learning Results**

Code				
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.			
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.			
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.			
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.			
C15	Understand ergonomic and anthropometric principles.			
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.			
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.			
C29	To know the ethical and legal bases of the profession in a changing social context.			
C36	To know and understand the methods, procedures and physiotherapeutic actions, aimed at both the actual therapy to be applied in the clinic for the reeducation or functional recovery, as well as the implementation of activities aimed at the promotion and maintenance of health.			
D1	Ability to communicate orally and in writing in Galician.			
D4	Creativity, entrepreneurial spirit and adaptation to new situations.			
D8	Ability to understand the meaning and application of the gender perspective in different areas of knowledge and professional practice with the aim of achieving a more just and egalitarian society.			

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
New	A2	B3	C13 C15	D1 D4 D8
New	A2	B3	C9 C13 C16 C21 C36	D1
New	A2		C9 C13 C16 C21 C36	D1

New	A2	B3	C13 C16 C21 C36	D1
New	A2		C13 C16 C21 C36	D1 D4
New	A2		C9 C13 C15 C16 C21 C36	D1 D8
New	A2	B3	C9 C13 C15 C16 C21 C29 C36	D1
New	A2	B3	C13 C15 C16 C21 C29 C36	D1

## Contents

Topic	
Bases and fundamentals of physiotherapy in urogynaecology and obstetrics	-
Anatomical and physiological considerations	-
Physiotherapy and pregnancy	-
Physiotherapy in preparation for childbirth, childbirth and postpartum	-
Pelvic floor dysfunctions	-
Urinary incontinence	-
Sexual dysfunctions	-
Physiotherapy and menopause	-

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	21	57	78
Laboratory practical	16	38	54
Mentored work	2	14	16
Essay questions exam	0.5	0	0.5
Essay	0.5	0	0.5
Systematic observation	0.5	0	0.5
Portfolio / dossier	0.5	0	0.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	The following teaching methodologies will be used in these classes: introductory activities, lectures, case studies, debate, discussion forums and collaborative learning.
Laboratory practical	The teaching methodology used in the practicals will be problem solving, case studies, debate and discussion forums.
Mentored work	The mentored work will be carried out by independent problem solving, presentation and defense.

## Personalized assistance

Methodologies	Description
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Lecturing	Students may request tutorials in person, by email or by remote campus. The teacher will indicate the date and time of the tutorial.
Laboratory practical	Students may request tutorials in person, by email or by remote campus. The teacher will indicate the date and time of the tutorial.
Mentored work	Students may request tutorials in person, by email or by remote campus. The teacher will indicate the date and time of the tutorial.
<b>Tests</b>	<b>Description</b>
Systematic observation	Students may request tutorials in person, by email or by remote campus. The teacher will indicate the date and time of the tutorial.
Portfolio / dossier	Students may request tutorials in person, by email or by remote campus. The teacher will indicate the date and time of the tutorial.

<b>Assessment</b>						
	Description	Qualification	Training	and Learning	Results	
Essay questions exam	(*)O exame teórico constará de preguntas de desenvolvemento. Para superar esta parte o alumnado deberá obter unha cualificación de 5 sobre 10.	40	A2	B3	C9 C13 C15 C16 C21 C29 C36	D1 D4 D8
Essay	(*)Elaborarase un traballo dos contidos da materia. A realización, exposición e defensa do traballo será obrigatoria.	10	A2	B3	C21 C29 C36	D1 D4 D8
Systematic observation	(*)O alumnado será avaliado nas actividades que se propoñan nas sesións prácticas e teóricas	40	A2	B3	C15 C16 C36	D1 D8
Portfolio / dossier	(*)O alumnado elaborará un cartafol de cada unha das sesións prácticas	10		B3	C13 C29	D4

### **Other comments on the Evaluation**

#### **Continuous evaluation**

By default, the student will have a continuous evaluation with 3 grades: a theoretical one with the grade of the exam of the essay questions, a practical one composed of the arithmetic average of the portfolio and the systematic observation and a last one with the grade of the work.

To pass, the student must have passed all the parts independently and attend 80% of the practical sessions. The non-attendance to the practical sessions means the loss of the continuous evaluation.

Students who have passed one of the parts will keep the approved part for the next call within the same academic year.

#### **General evaluation (when the student chooses not to participate in the continuous evaluation)**

Students may request the waiver of the continuous evaluation by communicating it to the coordinator of the subject within the established period. If so, the evaluation will be: 50% theoretical exam of essay questions and 50% practical exam, where the student will have to develop the techniques of each of the practical sessions.

Students who have passed one of the parts will keep the approved part for the next exam within the same academic year.

#### **Second opportunity**

Students will be able to examine 100% of the subject in this opportunity, by means of 50% of the theoretical exam of essay questions and 50% of the practical exam.

In order to pass the course, both evaluation tests must be passed independently.

**In any of the calls, if the student obtains a numerical grade higher than 5, but does not meet the requirements**

established to pass the subject, he/she will have a grade of 4.5 (fail). If he/she has a lower qualification, the grade obtained will be recorded.

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### Sources of information

#### Basic Bibliography

Walker C., **Fisioterapia en obstetricia y uroginecología**, 2ª, Elsevier Masson, 2013

Castillo Montes FJ., **Fisioterapia obstétrica y uroginecológica**, 1ª, Formación Alcalá, 2018

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Ramírez I, Blanco L, Kauffmann S., **Rehabilitación del suelo pélvico femenino:práctica clínica basada en la evidencia**, 1ª, Editorial médica Panamericana, 2014

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#### Complementary Bibliography

Soto M, Da Cuña I, Gutiérrez M, López S., Ojea A, Lantarón E., **Early 3-month treatment with comprehensive physical therapy program restores continence in urinary incontinence patients after radical prostatectomy: A randomized controlled trial**, *Neurourol Urodyn* ., 2020

Soto-González M, Da Cuña-Carrera I, Gutiérrez-Nieto M, Lantarón-Caeiro EM., **Assessment of male urinary incontinence postprostatectomy through the Consultation on Incontinence Questionnaire-Short Form**, *Prog Urol*, 2020

Soto-González M, Da Cuña-Carrera I, Gutiérrez-Nieto M, Lantarón-Caeiro EM., **Assessment of male urinary incontinence postprostatectomy through the Consultation on Incontinence Questionnaire-Short Form.**, *Prog Urol*, 2020

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### Recommendations

#### Subjects that are recommended to be taken simultaneously

Physical therapy in clinical specialties II/P05G171V01309

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**IDENTIFYING DATA****Physical Therapy in Pediatrics**

Subject	Physical Therapy in Pediatrics			
Code	P05G171V01307			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	1st
Teaching language	Spanish			
Department				
Coordinator	Monge Pereira, Esther			
Lecturers	Monge Pereira, Esther			
E-mail	esther.monge@uvigo.es			
Web				
General description	(*)Materia optativa de 6 créditos, dirixida a estudar os recursos de fisioterapia existentes para a toma de decisións de abordaxe terapéutica entre a variedade de problemas que poden alterar o desenvolvemento motriz nos pacientes pediátricos.			

**Training and Learning Results**

Code	
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
B2	Incorporate the ethical and legal principles of the profession into professional practice and integrate social and community aspects into decision making.
C7	Know the physiological and structural changes that can occur as a result of the application of physiotherapy.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C18	Encourage the participation of the user and family in their recovery process.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.
C38	Intervene in the areas of health promotion, prevention, protection and recovery.
D1	Ability to communicate orally and in writing in Galician.
D4	Creativity, entrepreneurial spirit and adaptation to new situations.
D7	Maintain an attitude of learning and improvement.
D8	Ability to understand the meaning and application of the gender perspective in different areas of knowledge and professional practice with the aim of achieving a more just and egalitarian society.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results		
New	B2	C9 C20 C21 C38	D1 D4 D7
New		C7 C9	D1
New	B1	C7 C9 C16 C19 C21	D1 D7

New	B1 B2	C7 C9 C16 C18 C19 C20 C21 C38	D1 D7
New	B1 B2	C7 C9 C16 C18 C19 C20 C21 C38	D1 D7 D8

## Contents

Topic	
Psychomotor development process	- Primitive reflexes. - Ontogenesis 0-12 months.
Prevalent pathological processes in pediatrics	- Cerebral palsy and related pathologies. - Congenital pathologies. - Respiratory pathologies. - Orthopedic pathologies.
Functional assessment in pediatrics	- Classification scales. - Functional assessment scales.
Physiotherapy intervention in pediatrics	- Estimulación temprana. - Abordaje del cólico del lactante. - Métodos específicos de intervención en fisioterapia: Bobath, Vojta, Le Meteyer, Castillo Morales. - Fisioterapia respiratoria en pediatría. - Intervención de fisioterapia en entornos educativos. - Adaptación y elaboración de ayudas posturales y de movilidad que ayuden al niño a nivel estructural, funcional, de actividad y participación.
Psychomotor stimulation programs	- Directed psychomotricity protocols. - Pediatric yoga.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Presentation	1	0	1
Lecturing	22	64	86
Laboratory practical	32	20	52
Mentored work	1	0	1
Discussion Forum	0	1	1
Presentation	1	0	1
Debate	4	0	4
Problem and/or exercise solving	0	2	2
Systematic observation	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	They will have the purpose of transmitting the objectives and planning of the subject, as well as clarifying the evaluation criteria to follow.
Presentation	Presentation and defense by the student before the teacher and the students of the supervised work.
Lecturing	The theoretical classes will be participatory and they will use the study of cases, the debate and the resolution of problems. The student will have at his disposal in MOOVI notes that will serve as a guide for the exam and prior study of certain activities.



Laboratory practical	The experimental demonstration, the role playing, the didactic treatment of errors and the systematic training will be used. The teacher will demonstrate how the assessment and/or treatment protocol should be carried out, then the students will carry out the practice in pairs among themselves, being corrected by the teacher and clarifying any doubts that may arise. In the correction, the position of the user/patient, the shots and contraptions made, as well as the execution of the maneuver and the ergonomics of the student who is doing the practice will be taken into account. Likewise, the learning attitude of the students will be taken into account.
Mentored work	El alumnado deberá elaborar, exponer y defender un trabajo en grupo.
Discussion Forum	There will be a discussion forum available to students to ask and resolve doubts, so that all doubts are collected for group learning.

### Personalized assistance

Methodologies	Description
Presentation	Group tutorials to resolve doubts about the presentation and defense of the work.
Lecturing	Individual or group tutorials to resolve doubts related to the theoretical classes, in addition to the use of the discussion forum where doubts will be resolved.
Laboratory practical	Individual or group tutorials to resolve doubts related to practical classes by appointment by email or through the MOOVI platform.
Mentored work	Group tutorials to resolve doubts about the development of group work.

### Assessment

	Description	Qualification	Training and Learning Results	
Lecturing	Theoretical examination of short questions.	40	C7 C9 C19	D7
Laboratory practical	Practical examination of resolution of a clinical supposition by means of role playing.	40	B1 B2	C7 C16 C18 C19 C20 C21 C38 D4 D7 D8
Mentored work	Assessment of the writing and contents of the written report.	5	B1	D1 D4 D7
Presentation	Assessment of the clarity of exposition and resolution of doubts by the class and the teacher.	5		D1 D4 D7
Systematic observation	In the classroom the handling of the practical contents by the students will be supervised, answering their queries.	10		C19 C20 C21 D7

### Other comments on the Evaluation

#### Minimum requirements:

In order to sit the practical exam, the student must take the theoretical exam.

Systematic observation will depend on attendance at practical classes, an assessment that will be considered passed with at least 87.5% attendance (corresponding to a single justified absence).

To pass the subject, the student must have passed each of the evaluations independently with 5 points out of 10. The fail grade will never be higher than 4.5 in those cases in which there is any part of the failed evaluation (below 5 points) regardless of whether the average of all the tests was greater than or equal to 5 points.

#### Continuous assessment:

- Carry out work in pairs. Analysis of an intervention article related to the subject, preparation of a poster with its data and oral presentation in the classroom. Delivery on the date marked in the programming of the subject and defense in the last 4 theoretical hours. 10% final mark.

- Theoretical exam of short questions to develop. 40% final mark.

- Practical examination of resolution of a clinical case. 40% final mark.

- Systematic observation. Assessment of attitude and management in the classroom during practical class hours. Dependent on minimum attendance at 87.5% of practical classes. 10% final mark.

#### Global evaluation in ordinary call (waiving continuous evaluation) / 2nd opportunity (July call):

- Theoretical exam of short questions to develop. 50% final mark.

- Practical examination of resolution of a clinical case. 50% final mark.

The Teaching Guide will follow the **REGULATION ON THE ASSESSMENT, QUALIFICATION AND QUALITY OF TEACHING AND THE STUDENT LEARNING PROCESS** (Approved in the faculty on April 18, 2023), as well as the specific adaptations for the Degree in Physiotherapy determined by the Center Board .

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### Sources of information

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#### Basic Bibliography

María Lourdes Macías Merlo y Joaquín Fagoaga Mata, **Fisioterapia en Pediatría**, 2, Editorial Médica Panamericana, 2018

Mónica Yamile Pinzón Bernal y Luisa Matilde Salamanca Duque, **Evaluación Neuropediátrica Funcional Fundamentos y métodos de aplicación.**, 1, Editorial Médica Panamericana, 2021

Juan Espinosa Jorge et al., **Guía esencial de rehabilitación infantil**, 1, Editorial Médica Panamericana, 2021

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#### Complementary Bibliography

Graciela Basso, **Neurodesarrollo en Neonatología**, 1, Editorial Médica Panamericana, 2016

Pablo Rosselli Cock y José Luis Duplat Lapedes, **Ortopedia Infantil**, 2, Editorial Médica Panamericana, 2012

L.Cascos-Vicente et al., **Abordaje fisioterapéutico en el tratamiento del cólico del lactante. Una revisión sistemática**, 2021

Castillo Montes Francisco Javier, **Fisioterapia respiratoria en pediatría**, Formación Alcalá, S.L., 2019

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### Recommendations

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#### Subjects that are recommended to be taken simultaneously

Manual Therapy in Neuromotor Disorders/P05G171V01301

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#### Subjects that it is recommended to have taken before

Human anatomy: Human anatomy/P05G171V01101

Physiology: Functional movement in physiotherapy/P05G171V01105

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<b>IDENTIFYING DATA</b>				
<b>Physical therapy in clinical specialties I</b>				
Subject	Physical therapy in clinical specialties I			
Code	P05G171V01308			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	9	Mandatory	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	González González, Yoana			
Lecturers	Monge Pereira, Esther			
E-mail	yoana@uvigo.gal			
Web				
General description	<p>This subject is focused on learning the theoretical and practical knowledge that a physiotherapist who participates in the rehabilitation of people who suffer the consequences of a dysfunction of the neuromusculoskeletal system should have.</p> <p>Abordaranse os beneficios da práctica adecuada de fisioterapia naqueles pacientes con disfuncións neuromusculoesqueléticas, xa que para que ésta sea beneficiosa, debe estar axustada ás capacidades da persoa, respetando as súas limitacións e favorecendo a súa funcionalidade.</p> <p>Para iso, os estudantes adquirirán a formación e o coñecemento que lles permita valorar o estado do paciente e lles permita propor as modalidades de fisioterapia axustadas ó seu nivel funcional, tendo en conta aquelas prácticas que poidan ser contraproducentes.</p>			

### **Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
A3	Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues.
A5	Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.
C22	Know and apply good clinical practice guidelines.
C35	To know and understand the sciences, models, techniques and instruments on which physiotherapy is based, articulated and developed.
C36	To know and understand the methods, procedures and physiotherapeutic actions, aimed at both the actual therapy to be applied in the clinic for the reeducation or functional recovery, as well as the implementation of activities aimed at the promotion and maintenance of health.
C37	To acquire adequate clinical experience that provides intellectual abilities and technical and manual skills; that facilitates the incorporation of ethical and professional values; and that develops the capacity to integrate the acquired knowledge.
D1	Ability to communicate orally and in writing in Galician.
D4	Creativity, entrepreneurial spirit and adaptation to new situations.

### **Expected results from this subject**

Expected results from this subject	Training and Learning Results
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-	A2	C9 C13 C21	
-	A2	C9 C13 C16 C19 C20 C21 C22 C35 C36 C37	
-	A2 A3 A5	C13 C21	D1
-	A2	C13 C16 C19 C20 C21 C22 C36 C37	D1 D4

## Contents

Topic	
Physiotherapy methods in the treatment of pediatric pathologies.	To know the different methodologies of treatment of pediatric dysfunctions.
Physiotherapy in disorders of the peripheral nervous system.	To know the methodologies of treatment of peripheral nervous system diseases.
Physiotherapy in spinal cord injuries.	To know the methodologies of treatment of spinal cord injuries.
Physiotherapy in neuromuscular processes.	To know the fundamental principles of work in neuromuscular processes.
Physiotherapy in oncology.	To know the fundamental principles of treatment of patients suffering from an oncological process.
Physiotherapy in degenerative processes (Parkinson, multiple sclerosis, ALS...)	To know the fundamental principles of application of the methodologies of treatment of the different degenerative processes.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	31	78	109
Presentation	1	6	7
Laboratory practical	40	60	100
Essay	6	0	6
Essay questions exam	1	0	1
Simulation or Role Playing	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	The guidelines of the methodologies to be developed by the students during the course will be indicated.
Lecturing	The information on the contents of the subject will be transmitted by means of an exposition supported by audiovisual material.
Presentation	The contents of the subject will be presented, as well as the methodologies that will be developed during the course.
Laboratory practical	The student will have to carry out the practice of the contents presented.

## Personalized assistance

Methodologies	Description
Lecturing	Lecture Doubts raised during the development of the theoretical contents will be solved, in addition to during the classes, by means of face-to-face tutorials in the professors' offices or by e-mail.

Laboratory practical The doubts raised during the development of the practical contents will be solved, in addition to during the classes, by means of face-to-face tutorials in the offices of the teaching staff or by e-mail.

<b>Assessment</b>					
	Description	Qualification	Training and Learning Results		
Lecturing	The knowledge acquired in the lectures will be evaluated. The theoretical exam will consist of development questions. To pass this part the student must obtain a qualification of 5 out of 10.	40	A2	C9 C13 C21	
Presentation	The knowledge and skills acquired through the completion of the tutored work are evaluated through the presentation of the written work and its defense.	20	A2	C13 C16 C19 C20 C21 C36 C37	D1 D4
Laboratory practical	The knowledge and skills acquired through laboratory practicals will be evaluated through simulation or role playing.	40	A2 A3 A5	C9 C13 C16 C19 C20 C21 C22 C35 C36 C37	D1

#### **Other comments on the Evaluation**

##### **CONTINUOUS EVALUATION:**

In the continuous evaluation mode the evaluation percentages are:

-Exam of development questions that will account for 40% of the grade of the subject, Practical Exam (Simulation or Role Playing): that will account for 40% of the grade and the work, of a compulsory nature, that will account for 20% of the grade. To pass the subject a minimum of 5 out of 10 must be obtained in the theoretical exam, in the practical exam and in the work.

Continuous assessments outside the examination period shall be indicated in the timetable.

-GLOBAL EVALUATION (waiver of continuous evaluation):

Due to the characteristics of the subject and the distribution of the evaluation percentages, in the global evaluation modality the same evaluation percentages and the same criteria for passing the subject are maintained.

Those who do not wish to follow the continuous evaluation must notify in writing following the procedure established by the Faculty of Physiotherapy. The resignation to the continuous evaluation must be done in the 5th week of teaching, which means that the student will assume the global evaluation established in the subject. Once the continuous evaluation has been waived, the student will not be entitled to it, nor to the considerations established therein.

#### **Sources of information**

##### **Basic Bibliography**

Marta Bisbe Gutiérrez, Carmen Santoyo Medina, Vicenç Tomàs Segarra i Vidal., **Fisioterapia en Neurología: Procedimientos para restablecer la capacidad funcional.**, Medica Panamericana, 2012

Marta Bisbe Gutiérrez, Carmen Santoyo Medina, **Fisioterapia en neurología: Procedimientos para restablecer la capacidad funcional**, Medica Panamericana, 2021

Sophie Levitt, **Tratamiento de la parálisis cerebral y del retraso motor**, 5ª edición, Medica Panamericana, 2013

##### **Complementary Bibliography**

Roberto Cano de la Cuerda, Rosa Mª Martínez Piédrola, Juan Carlos Miangolarra Page, **Control y Aprendizaje Motor**, Medica Panamericana, 2015

Roberto Cano de la Cuerda, Susana Collado Vázquez., **Neurorrehabilitación: Métodos específicos de valoración y tratamiento**, Medica Panamericana, 2012

Rodríguez, Mª & Cano de la Cuerda, Roberto & Collado-Vazquez, Susana & Casas, Patricia, **Apps en neurorrehabilitación**, Dykinson, 2016

Kisner y Colby, **Ejercicio Terapéutico: Fundamentos y técnicas**, Medica Panamericana, 2010

Calais, Blandine, **ANATOMIA PARA EL MOVIMIENTO (T. I): INTRODUCCION AL ANALISIS DE LAS TECNICAS CORPORALES**, La liebre de marzo, 2012

#### **Recommendations**

**Subjects that continue the syllabus**

Physical therapy in clinical specialties I/P05G171V01308

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**Subjects that are recommended to be taken simultaneously**

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Physical therapy in clinical specialties II/P05G171V01309

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**Subjects that it is recommended to have taken before**

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Manual Therapy in Neuromotor Disorders/P05G171V01301

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**IDENTIFYING DATA****Physical therapy in clinical specialties II**

Subject	Physical therapy in clinical specialties II			
Code	P05G171V01309			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	9	Mandatory	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Soto González, María Mercedes			
Lecturers	Mollinedo Cardalda, Irimia Rodil Gargallo, María Soto González, María Mercedes			
E-mail	m.soto@uvigo.es			
Web	<a href="http://http://fisioterapia.uvigo.es/gl/">http://http://fisioterapia.uvigo.es/gl/</a>			
General description	(*)Nesta materia preténdese que o alumnado adquira os coñecementos e destrezas, precisos para o tratamento dos distintos procesos e patoloxías do sistema musculoesquelético, desde la perspectiva de la fisioterapia.			

**Training and Learning Results**

Code			
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.		
A3	Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues.		
A5	Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.		
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.		
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.		
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.		
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.		
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.		
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.		
C22	Know and apply good clinical practice guidelines.		
C36	To know and understand the methods, procedures and physiotherapeutic actions, aimed at both the actual therapy to be applied in the clinic for the reeducation or functional recovery, as well as the implementation of activities aimed at the promotion and maintenance of health.		
C37	To acquire adequate clinical experience that provides intellectual abilities and technical and manual skills; that facilitates the incorporation of ethical and professional values; and that develops the capacity to integrate the acquired knowledge.		
D1	Ability to communicate orally and in writing in Galician.		
D4	Creativity, entrepreneurial spirit and adaptation to new situations.		

**Expected results from this subject**

Expected results from this subject	Training and Learning Results	
New	A2	C9 C13 C21

New	A2	C9 C13 C16 C19 C20 C21 C22 C36 C37	
New	A2 A3 A5	C13 C21	D1
New	A2	C13 C16 C19 C20 C21 C22 C36 C37	D1 D4

### Contents

Topic	
Physiotherapy in traumatic and bone processes	-
Physiotherapy in orthopedic and bone processes	-
Physiotherapy in dermatology	-
Physiotherapy in urogynecological processes	-
Physiotherapy, physical activity and pathology	-
Physiotherapy in amputees	-
Physiotherapy in cancer	-

### Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	37	87	124
Laboratory practical	39	60	99
Essay questions exam	1	0	1
Simulation or Role Playing	0.5	0	0.5
Systematic observation	0.5	0	0.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

### Methodologies

	Description
Lecturing	The following methodologies will be used in these classes: introductory activities, discussion forums, collaborative learning, case studies and problem solving.
Laboratory practical	In the development of practices, methodologies such as problem solving, case study, debate and problem solving will be used autonomously.

### Personalized assistance

Methodologies	Description
Lecturing	Students may request tutorials via email, either in person or through the remote campus
Laboratory practical	Students may request tutorials via email, either in person or through the remote campus

### Assessment

Description	Qualification	Training and Learning Results



Essay questions exam	The theoretical exam will consist of development questions. To pass this part, the student must obtain a score of 5 out of 10.	40	A2 A3 A5	C9 C13 C16 C19 C20 C21 C22 C36 C37	D1 D4
Simulation or Role Playing	The test will consist of solving three practical cases that the students must choose at random. To pass this part, the student must obtain a grade of 5 out of 10.	40	A2 A3 A5	C9 C13 C16 C19 C20 C21 C22 C36 C37	D1 D4
Systematic observation	The teaching staff will carry out systematic observation through attentive, rational, planned and systematic perception to describe and record the manifestations of student behavior.	20	A2	C16 C19 C20 C36 C37	D4

### Other comments on the Evaluation

Or students who do not adhere to continuous assessment, must communicate it in writing following the procedure established by the Faculty of Physiotherapy. A waiver of continuous assessment must be made as the deadline date in the 5th week of teaching, this waiver will mean that the student adheres to the global assessment established in the subject. Once the continuous evaluation has been waived, he will not have the right to it nor any other considerations that are established in it.

In addition to the modalities of assessment, in order to pass the subject, the student must have passed the theoretical and practical exam independently, and it may be the case that a student obtains a grade higher than 5 in a global assessment, but As indicated, if some of the parts are not passed, they will receive a grade of 4.5. It does not assume that the student passes one of the parts, the same grade will be saved, but only within the same academic year.

In addition, in order to take the practical exam in calquera of the calls and modalities, it is an essential requirement that the student take the theoretical exam.

### CONTINUOUS ASSESSMENT

Exam of Essay questions exam- this exam will be carried out on the data established in the programming of the subject, it will consist of 10 development questions worth each of them 10 points and will contribute or 40% of the final grade.

Simulation or role playing- will be carried out on the exam dates established in the calendar, and will consist of the resolution of 3 clinical cases that will account for 40% of the final grade.

Systematic observation - or teachers will follow up on students in terms of aptitudes and attitudes. To adhere to this evaluation, it is essential to have a minimum attendance of 80% of the practical classes and suporá or 20% of the final grade.

**GLOBAL EVALUATION** (not in the case of waiving continuous evaluation):

In this case, the students will be evaluated with the following success:

Essay questions exam- 10 development questions with a score of 1 point each (50% of grades)

Simulation or role playing- exam to solve three practical cases (50% give grade)**2nd CHANCE**

**The students who adhere to continuous assessment will be assessed according to the percentages indicated in this guide.**

**The students who renounce continuous assessment and follow the global assessment will have the same percentages of assessment than in the ordinary call in the modality of global assessment.**

### Sources of information

#### Basic Bibliography

Alegre C., **Fisioterapia en reumatología**, 1ª, Alcalá de Henares: Asetip, 2001

Goodyer Paul., **Compendio de técnicas en rehabilitación musculoesquelética**, 1ª, McGraw-Hill Interamericana, 2003

Seco Calvo J., **Fisioterapia en Especialidades Clínicas**, 1ª, Médica Panamericana, 2016

Walker C., **Fisioterapia en obstetricia y uroginecología**, 2ª, Elsevier Masson, 2013

Seco Calvo J., **Afecciones medicoquirúrgicas para fisioterapeutas**, Médica Panamericana, 2017

Charles E. Giangarra, **Rehabilitación ortopédica clínica**, 4ª, Elsevier, 2018

Klaus Buckup & Johannes Buckup, **Pruebas clínicas para patología ósea, articular y muscular**, 5ª, Elsevier, 2013

Seco Calvo J., **Metodos específicos de intervencion en fisioterapia**, Médica Panamericana, 2021

Castillo Montes FJ., **Fisioterapia en el tratamiento de cicatrices**, ALCALA GRUPO, 2022

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**Complementary Bibliography**

Haarer-Becker R, Schoer D., **Manual de técnicas de fisioterapia: (aplicación en traumatología y ortopedia)**, Editorial Paidotribo, 2001

Miralles Marrero R, Miralles-Rull I., **Biomecánica clínica de las patologías del aparato locomotor**, 1ª, Elsevier Masson, 2006

Orrego & Morán, **Ortopedia y traumatología básica**, Universidad delos Andes, 2014

Díaz Mohedo,, **Manual de Fisioterapia en traumatología**, Elsevier, 2015

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**Recommendations****Subjects that continue the syllabus**

Internships: Clinical stays/P05G171V01984

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**Subjects that it is recommended to have taken before**

Human anatomy: Human anatomy/P05G171V01101

Physiology: Functional movement in physiotherapy/P05G171V01105

Kinesitherapy/P05G171V01203

General physiotherapy I/P05G171V01204

Cardiorespiratory Physical Therapy/P05G171V01302

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**IDENTIFYING DATA****Physiotherapy in lymphedema**

Subject	Physiotherapy in lymphedema			
Code	P05G171V01310			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	#EnglishFriendly Spanish Galician			
Department				
Coordinator	da Cuña Carrera, Iria			
Lecturers	da Cuña Carrera, Iria			
E-mail	iriadc@uvigo.es			
Web				
General description	<p>The subject of Physiotherapy in lymphedema is an optional subject for the second semester of the Degree in Physiotherapy. It is intended that you achieve both theoretical and practical skills to address the different types of edema in different areas from oncology, aesthetics, obstetrics and traumatology, among others. It is a subject with a lot of practical load, to learn the realization of all the techniques included in the Complex Decongestive Therapy, that the therapy recommended at present for the treatment of the lymphedema.</p> <p>English friendly subject: International students may request from the teachers: a) resources and bibliographic references in English, b) tutoring sessions in English, c) exams and assessments in English.</p>			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
C7	Know the physiological and structural changes that can occur as a result of the application of physiotherapy.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C17	Know, design and apply the different modalities and general procedures of intervention in Physiotherapy: Massage Therapy, Electrotherapy, Magnetotherapy, Hydrotherapy, Balneotherapy, Climatotherapy, Thalassotherapy, Thermotherapy, Cryotherapy, Vibrotherapy, Phototherapy, Pressure Therapy, therapies derived from other physical agents, as well as fundamental aspects of Ergotherapy and other therapies related to the field of competence of physiotherapy.
C18	Encourage the participation of the user and family in their recovery process.
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.
C22	Know and apply good clinical practice guidelines.
C38	Intervene in the areas of health promotion, prevention, protection and recovery.
D1	Ability to communicate orally and in writing in Galician.
D7	Maintain an attitude of learning and improvement.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results
Know the lymphatic physiology and pathophysiology and describe the bases of Manual Lymphatic Drainage and Complex Decongestive Therapy.	C7 C16 C17 C21 C38
Identify pathophysiology in oncology, in plastic, reconstructive and aesthetic surgery amenable to lymphedema treatment.	C7 C9

Apply the different techniques of Complex Decongestive Therapy.

B1 C16 D7

C17  
C18  
C21  
C22

Perform a kinesitherapy protocol applied to a patient with lymphedema

A2 B1 C16 D1  
C22 D7

## Contents

Topic

### THEORETICAL TOPICS

Anatomy and physiology of the lymphatic system Introduction to the lymphatic system. lymphatic physiology. lymphatic pathophysiology. Physiopathology of the formation of edema of vascular and lymphatic origin.

Physiotherapy of lymphedema in plastic, reconstructive and aesthetic surgery. Basics of manual lymphatic drainage. Edema prophylaxis.

Physiotherapy of lymphedema in oncology Complex decongestive physiotherapy. Manual lymphatic drainage in cancer patients. Multilayer bandage. Pressotherapy. therapeutic exercise.

### PRACTICAL TOPICS

Manual lymphatic drainage. Manual lymphatic drainage practice in the upper limb, lower limb, trunk and face. Call and reabsorption maneuvers

Multilayer bandage.

Practice of multilayer bandage in upper limb and lower limb

Pressotherapy.

Pressotherapy practice in the upper and lower limbs

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	14	65	79
Laboratory practical	25	26	51
Mentored work	1	14	15
Essay questions exam	1	0	1
Essay	1	0	1
Report of practices, practicum and external practices	1	0	1
Systematic observation	1	0	1
Simulation or Role Playing	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	The following teaching methodologies will be used: introductory activities, lecture, problem solving, debate, discussion forums and collaborative learning.
Laboratory practical	Debate and case studies will be encouraged in laboratory practices.
Mentored work	Through the completion of the work, autonomous problem solving will be encouraged. The work will include the completion of a written document as well as its presentation in the classroom.

## Personalized assistance

Methodologies	Description
Lecturing	Tutorials in person, by email or through the remote campus when students request it.
Laboratory practical	Tutorials in person, by email or through the remote campus when students request it.
Mentored work	Small group tutorials in person, by email or through the remote campus when the students request it.

## Assessment

	Description	Qualification	Training and Learning Results
Essay questions exam	Theoretical exam: it consists of 5 questions, not being able to leave any without an effective answer.	40	C7 C9 C16 C17 C21 C38

Essay	The realization, exhibition and defense of the work is mandatory. The formulation and the analysis carried out will be valued, as well as the writing and the use of bibliographic sources.	10	A2 B1	C16 C17	D1 D7
Report of practices, practicum and external practices	Delivery of an internship report according to the model provided by the teacher,	10	B1	C16 C17 C18 C21 C22	D7
Systematic observation	It is mandatory to attend 80% of the practical classes in order to carry out the systematic observation	30	B1	C16 C17 C21 C22	D7
Simulation or Role Playing	On the last day of class, a simulation test or role playing will be carried out, where the students will randomly choose a clinical case and will have to solve it as well as execute the chosen technique.	10	B1	C16 C17 C18 C21 C22	D7

### Other comments on the Evaluation

Students who do not take the continuous assessment must communicate this in writing according to the procedure established by the Faculty of Physiotherapy. The waiver of continuous assessment must be done as a deadline in the 5th week of teaching; this waiver will mean that the students accept the global assessment established for the subject. Once you have waived the continuous evaluation, you will not have the right to it or to the considerations established in it.

In any of the assessment methods, to pass the subject the students must have independently passed the assessment of the practical content, the theoretical content and the work. If, in the event that the student obtains a grade higher than 5 in the final assessment as an average of the grades obtained in the different assessment tests, but does not have one of the passed parts, he/she will obtain a grade of 4.5.

### Continuous assessment

The continuous evaluation will include the evaluation of theoretical content through a developmental exam (40%) in which an effective response is required. For the evaluation of the practical content in this modality, attendance at 80% of the practices is required. The practical content will be evaluated through systematic observations in classes (30%), through the delivery of a practice report (10%) and through a simulation test (10%). In addition, the students must carry out a group work (10%)

### Global assessment

In the event that the students renounce the continuous assessment, they will have the right to the global assessment which will consist of:

- Development exam (40%)
- Laboratory practice exam (50%)
- Carrying out a work (10%)

### Second chance assessment

The second chance assessment will be the same as the overall assessment.

### Sources of information

#### Basic Bibliography

Executive Committee of the International Society of Lymphology, **The diagnosis and treatment of peripheral lymphedema: 2020 Consensus Document of the International Society of Lymphology**,

Leduc, A, Leduc, O, **Drenaje Linfático Teoría y Práctica.**, Masson, Barcelona 2003

Ferrandez Jean-Claude, **El Sistema linfático**, Panamericana, Madrid 2006

#### Complementary Bibliography

Leduc, A, Leduc, O, <http://www.lympho.net>,

Millán Casas, Laura, **Linfedema: estudio y tratamiento**, Alcalá la Real: Formación Alcalá,, 2012

Roldán Jiménez, C, **Cáncer de mama y ejercicio físico**, 2021

Seco, J, **Sistema cardiorrespiratorio. Métodos, fisioterapia clínica y afecciones para fisioterapeutas**, 9788491102014, panamericana, 2018

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**Recommendations**

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**Subjects that it is recommended to have taken before**

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General physiotherapy I/P05G171V01204

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**IDENTIFYING DATA****Physical Therapy for Differently-Abled People**

Subject	Physical Therapy for Differently-Abled People			
Code	P05G171V01311			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Mollinedo Cardalda, Irimia			
Lecturers	Mollinedo Cardalda, Irimia			
E-mail	imollinedo@uvigo.es			
Web				
General description	This is an elective subject in the second term of the third course that is centered on functional diversity and especially in the process of aging. In functional diversity, the physiotherapist has to evaluate his/her patient identifying those appearances that deserve special intervention to keep the greater possible independence. Finally, psychomotor reeducation can be a very interesting approach in patients with functional diversity as it is centered on the main appearances of psychomotricity: motor, cognitive, and socio-affective areas.			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
B2	Incorporate the ethical and legal principles of the profession into professional practice and integrate social and community aspects into decision making.
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.
C3	Identify the psychological and social factors that influence the state of health or disease of individuals, families and community.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C38	Intervene in the areas of health promotion, prevention, protection and recovery.
D1	Ability to communicate orally and in writing in Galician.
D3	Recognition of diversity and multiculturalism

**Expected results from this subject**

Expected results from this subject	Training and Learning Results			
To define the concept of functional diversity, in addition to his current context in society.	A2	B3	C9 C13	D3
To describe the natural process of aging and the distinct pathological situations concurrent with this stage of life.	A2	B3	C3 C9 C13	D1 D3
To describe the main approaches of physiotherapy for the intervention with patients with some type of functional diversity or situation of dependency.	A2	B1 B3	C3 C9 C13 C16	D1 D3
To describe and differentiate the main resources of available technical help for people with distinct degrees of dependency and functional diversity to facilitate their daily, professional, or sportive tasks.	A2	B1 B2 B3	C3 C9 C13	D1 D3

To describe and demonstrate how to evaluate the functional state and take part in a program of psychomotor reeducation in elderly.	A2	B1 B2 B3	C3 C9 C13 C16 C38	D1 D3
To make, expose and defend a work in a group or individual about a theme related to the contents of the matter.	A2	B1 B2 B3	C9 C13 C16 C38	D1 D3

### Contents

Topic	
Functional diversity.	The concept of functional diversity and his current context.
Process of aging.	Physiological and morphological changes that experiment the different organic systems and how these changes can drive to different pathological processes and functional worsening.
Functional evaluation in the functional diversity	The main used tools to define the functional state of the patients oriented to plan an intervention based on the programs of psychomotor reeducation.
Physiotherapy in the functional diversity, dependency and mental health.	The physiotherapy's fundamental role in promoting the independence of patients with functional diversity, situations of dependency (and with his familiar), and mental affectation.
Programs of psychomotor reeducation.	The structure of different sessions of psychomotor reeducation in different populations taking into account the area motor, cognitive, and psycho-affective areas of psychomotor reeducation.

### Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	1	2
Mentored work	2	2	4
Lecturing	22	40	62
Laboratory practical	16	30	46
Essay questions exam	1	8	9
Simulation or Role Playing	0	12	12
Essay	0	10	10
Objective questions exam	0.5	4	4.5
Problem and/or exercise solving	0.5	0	0.5

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

### Methodologies

	Description
Introductory activities	The coordinator of the subject will explain the points to take into account referents to the contents of the subject and lecturers, the form of evaluation to carry out and as the theoretical and practical classes of the subject will be structured, in addition to the work in group or individual that has to be made. She will explain the schedule proposal of classes to carry out during the term as well the dates of realization of the examinations. Finally, she will explain the educational obligations of the students for the development of the subject.
Mentored work	Development of a practical theoretical/work on a thematic related with the contents of the subject. The groups of work will be determined by thematic at the beginning of the term by the coordinator of the subject. It exists the possibility that the work could be developed in individual form (global assessment). The work will consist of a first part where students will do a review of the scientific literature on the agreed subject (it will be delivered a small part in written form) and a second part where students carry out a tutorial video (related with the context of the work). It will be carried out an individual follow-up of each member of the group (if the work is in group) as the marks will be established in individual form. The terms of delivery of the work and presentation (by Moovi) will be published in the beginning of the term in Moovi.
Lecturing	In theoretical classes, it will combine magistral lessons with theoretical/participatory classes that boost and motivate the participation of the students. It will be able to establish previous activities to the teaching of the class and its delivery by Moovi for his back discussion during the theoretical class. Besides, during the classes, activities of resolution of problems and collaborative learning could be carried out. To the criterion of the different lecturers of the modules, it will be able to establish forums of discussion in Moovi.



Laboratory practical	It will follow a demonstrative methodology, looking for the integration of the theoretical knowledge into the practice. The students will make practice, being corrected by the lecturer and solving all the doubts that can arise. Besides, studies of clinical cases and debates related to the thematic of the classes could be developed.
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### Personalized assistance

Methodologies	Description
Mentored work	The personalized attention will be centered on solving doubts, orienting the work to make in the subject, and carrying register and value the made by the students of the same group and also of individual form for each member. It will be able to do by face-to-face form or by remote form through Remote Campus in the virtual dispatch of each lecturer of the subject.
Lecturing	The personalized attention will be centered on the solution of doubting their referents to the theoretical contents that can have the students and orient their efforts in the subject. It will be able to do by face-to-face form or by remote form through Remote Campus in the virtual dispatch of each lecturer of the subject.
Laboratory practical	The personalized attention will be centered on the solution of doubting their referents to the practical contents that can have the students, and orient their efforts in the matter. It will be able to do by face-to-face form or by remote form through Remote Campus in the virtual dispatch of each lecturer of the subject.

### Assessment

	Description	Qualification	Training and Learning Results			
Essay questions exam	It consists of questions to develop on the agenda of the subject. All questions will have the same value. The student must achieve a minimum of 10 out of 20 for the exam score to count towards the final qualification.	20	A2	B1 B2 B3	C3 C9 C13 C16	D1 D3
Simulation or Role Playing	These simulations will be delivered in video format. It will be carried out in groups of three to four people. Students must achieve a minimum of 5 out of 10 for the mark to count towards the final grade.	35	A2	B1 B2 B3	C3 C9 C13 C16 C38	D1 D3
Essay	It is compulsory to complete and pass the course work in order to pass the subject. The work will be considered passed if it reaches, at least, 10 points out of 20. The work will be delivered in digital support using the virtual platform Moovi. This work is a group project.	20	A2	B1 B2 B3	C9 C13 C16 C38	D1 D3
Objective questions exam	It consists of multiple-choice questions with 4 answer options on the subject matter. Students must achieve a minimum of 5 out of 10 for the exam score to count towards the final grade.	15	A2	B1 B2 B3	C3 C9 C13 C16	D1 D3
Problem and/or exercise solving	Problem solving or exercises during some of the theoretical lessons.	10	A2	B1 B2 B3	C3 C9 C13 C16 C38	D1 D3

### Other comments on the Evaluation

#### Continuous Evaluation:

Students must attend 80% of the theoretical sessions and 80% of the practical sessions. Excused absences shall be considered to be those that adhere to Article 15 of the regulations.

Interactive group exercises during some theory classes through the Kahoot app, where points will be awarded in the final grade depending on the qualification in the activity. In addition to debates and problem solving will be performed.

It is compulsory to pass the work with a 5 out of 10 points in order to pass the subject. The rest of the parts, if the student does not reach 5 out of 10 points, will not count towards the final grade, but it is not a criterion for failing the subject. If in the final sum of the parts, the student does not reach 5 out of 10 points, he/she will go to the extraordinary evaluation with the theoretical and practical contents.

#### Global evaluation:

Students who do not wish to follow the continuous assessment must notify in writing following the procedure established by the Faculty of Physiotherapy. The waiver of continuous assessment must be made in the 5th week of teaching, which means

that the student will assume the global assessment established in the subject. Once the continuous assessment has been waived, the student will not be entitled to it, nor to the considerations established therein.

- Realization of an exam of questions of development on the agenda of the subject. All the questions will have the same value. This exam represents 50% of the final grade. Training and learning results: A2, B1, B2, B3, C3, C9, C13, C16, D1, D2.
- Simulation or role playing. Practical exam where students answer different questions in a practical way. These practical cases are chosen at random. In order to be able to take the practical exam, the student must first take the theoretical exam. This exam accounts for 35% of the final grade. Training and learning results: A2, B1, B2, B3, C3, C9, C13, C16, C38, D1, D2.
- Completion of the work of the subject and passing it is compulsory in order to pass the subject. The work will be considered passed if it reaches at least 5 points out of 10. The work will be delivered in digital support through the Moovi platform. This work is individual and represents 15% of the final grade. Training and learning outcomes: A2, B1, B2, B3, C9, C13, C16, C38, D1, D2.

### **Extraordinary evaluation:**

For students who do not achieve 5 out of 10 points in the final continuous assessment grade (only the mark for the work will be kept if it is passed). For students with a global assessment, the parts that were passed with a 5 out of 10 will be kept.

The modality consists of:

- Realization of an exam of questions of development on the agenda of the subject. All the questions will have the same value. This exam represents 50% of the final grade. Training and learning results: A2, B1, B2, B3, C3, C9, C13, C16, D1, D2.
- Simulation or role playing. Practical exam where students answer different questions in a practical way. These practical cases are chosen at random. In order to be able to take the practical exam, the student must first take the theoretical exam. This exam accounts for 35% of the final grade. Training and learning results: A2, B1, B2, B3, C3, C9, C13, C16, C38, D1, D2.
- Completion of the work of the subject and passing it is compulsory in order to pass the subject. The work will be considered passed if it reaches at least 5 points out of 10. The work will be delivered in digital support through the Moovi platform. This work is individual and represents 15% of the final grade. Training and learning outcomes: A2, B1, B2, B3, C9, C13, C16, C38, D1, D2.

It is necessary to pass all parts, with a 5 out of 10 points to pass the subject.

The Teaching Guide will follow the "REGULAMENTO SOBRE A AVALIACIÓN, A CALIFICACIÓN E A CALIDADE DA DOCENCIA E DO PROCESO DE APRENDIZAXE DO ESTUDANTADO" (Aprobado no claustro do 18 de abril de 2023), as well as the specific adaptations for the Degree in Physiotherapy determined in Xunta de Centro.

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### **Sources of information**

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Lazcano, **Clasificación Internacional de la Funcionalidad y de la Discapacidad y de la Salud Explicación y ejemplos**, 2020

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## **Recommendations**

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### **Subjects that are recommended to be taken simultaneously**

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Physical therapy in clinical specialties I/P05G171V01308

Physical therapy in clinical specialties II/P05G171V01309

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### **Subjects that it is recommended to have taken before**

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Human anatomy: Human anatomy/P05G171V01101

Physiology: Human physiology/P05G171V01102

Physiology: Functional movement in physiotherapy/P05G171V01105

Human anatomy: Medical conditions/P05G171V01201

Human anatomy: Surgical conditions/P05G171V01202

Manual Therapy in Neuromotor Disorders/P05G171V01301

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**IDENTIFYING DATA****Cardiac rehabilitation**

Subject	Cardiac rehabilitation			
Code	P05G171V01312			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	#EnglishFriendly Spanish Galician			
Department				
Coordinator	González Represas, Alicia			
Lecturers	González Represas, Alicia			
E-mail	alicia@uvigo.es			
Web	<a href="http://https://moovi.uvigo.gal/">http://https://moovi.uvigo.gal/</a>			
General description	Cardiovascular diseases are the main problem of health in developed countries. The objective of the subject is to make the students acquire the necessary knowledge to be part of the multidisciplinary team of the Cardiac Rehabilitation programs. Subject of the English Friendly program. International students may request teachers: a) materials and references bibliographies for monitoring the subject in English, b) attend tutoring in English, c) tests and assessments in English.			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
A5	Students are able to convey information, ideas, problems and solutions to both specialist and non-specialist audiences.
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
B4	Acquire basic scientific training in research.
C6	Identify anatomical structures as a basis of knowledge to establish relationships dynamically with the functional organization.
C9	Know the pathophysiology of diseases, identifying the manifestations that appear throughout the process, as well as the medical-surgical treatments, mainly in their physiotherapeutic and orthopedic aspects. To identify the changes produced as a consequence of the physiotherapy intervention. Encourage the participation of the user and family in the recovery process.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.
C24	Promote healthy lifestyle habits through health education.
D1	Ability to communicate orally and in writing in Galician.
D2	Computer skills related to the field of study

**Expected results from this subject**

Expected results from this subject	Training and Learning Results	
LO1: Describe the concept of Cardiac Rehabilitation and the structure of cardiac rehabilitation programs	A2	
LO2: Describe the anatomy of the heart and great vessels, as well as the pathophysiology of the most frequent heart diseases in cardiac rehabilitation programs	A2	C6
LO3: Describe the medical-surgical treatments of the most frequent heart diseases in Cardiac Rehabilitation programs		C6 C9
LO4: Describe and explain the main signs and symptoms of heart disease, as well as the most frequent assessment tests in Cardiac Rehabilitation programs		C6 C9

LO5: Explain the physiological and therapeutic effects of exercise on the most frequent heart diseases in cardiac rehabilitation programs				C6 C9
LO6: Design an exercise program for the most frequent heart diseases in Cardiac Rehabilitation programs				C16 C19 C20 C21
LO7: Describe cardiovascular prevention strategies				C24
LO8: Execute the cardiorespiratory resuscitation protocol	A2			C9 C19 C20 C21
LO9: Run the cardiovascular assessment procedure	A2			C16 C19 C21
LO10: Execute an exercise program in Cardiac Rehabilitation	A2			C16 C19
LO11: Carry out, present and defend a Cardiac Rehabilitation project as a group	A2 A5	B1 B4	C20 C21	D1 D2

## Contents

Topic	
Theory topic	I.1. Conceptual framework. Cardiac rehabilitation concept. Indications and applications of cardiac rehabilitation. Contraindications.
I. Introduction to cardiac rehabilitation.	
II. Cardiovascular system.	II.1. Cardiovascular structure and function II.2. cardiovascular pathophysiology.
III. Treatments in cardiac pathology	III.1. Medical-surgical treatments. III.2. Pharmacological treatments. III.3. Physiotherapy in the preoperative and postoperative period.
IV. Physical recognition oriented to therapeutic exercise programs for their prescription and follow-up.	IV. Cardiac exploration protocols and interpretation of tests for the design of therapeutic exercise programs.
V. Rehabilitation programs in cardiac pathology.	V.1. Cardiac rehabilitation programs in phase I in different population groups and pathologies. V.2. Cardiac rehabilitation and prevention programs in phase II in different population groups and pathologies. V.3. Rehabilitation programs in phase III in different groups population and pathologies.
VI. Prevention programs of Heart disease	VI.1. Strategies for the prevention of cardiac pathologies.
Practical topic	I.1. Performing cardiac examination tests. I.2. Interpretation of cardiac examination tests.
I. Exploration protocols.	
II. Cardiac rehabilitation programs.	II.1. Design of cardiac rehabilitation programs according to the cardiac exploration.
III. Action in emergencies and cardiovascular emergencies.	III.1. Actions in emergency/urgency situations at the cardiovascular level. III.2. Action in case of cardiorespiratory arrest. Cardiopulmonary resuscitation protocol.

## Planning

	Class hours	Hours outside the classroom	Total hours
Introductory activities	1	0	1
Lecturing	21	64	85
Collaborative Learning	4	4	8
Previous studies	0	4	4
Debate	1	1	2
Case studies	2	0	2
Laboratory practical	10	24	34
Problem solving	2	2	4
Autonomous problem solving	0	2	2
Mentored work	0	4	4
Presentation	1	0	1
Portfolio / dossier	0	2	2
Systematic observation	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Introductory activities	Activities aimed at making contact and gathering information about students, as well as presenting the subject.
Lecturing	Presentation by the teacher of the contents of the subject object of study, theoretical bases and / or guidelines of a work, exercise that the student has to develop.
Collaborative Learning	It includes a group of teaching procedures that start from the organization of the class in small mixed and heterogeneous groups where the students work in a coordinated way with each other to develop academic tasks and delve into their own learning.
Previous studies	Search, reading and work of documentation, previous to the classes or practices of laboratory, that realizes the alumnado of autonomous form.
Debate	Open talk between a group of students. You can focus on a topic of the contents of the subject, the analysis of a case, the result of a project, exercise or problem previously developed in a master session ...
Case studies	Analysis of a real fact, problem or event in order to know it, interpret it, solve it, generate hypotheses, test data, reflect, complete knowledge, diagnose it and train in alternative solution procedures.
Laboratory practical	Activities of application of the knowledge to concrete situations and of acquisition of basic and procedural abilities related to the matter object of study. They are developed in special spaces with specialized equipment (Laboratories, computer rooms, etc ...)
Problem solving	Activity in which problems and / or exercises related to the subject are formulated. The student must develop the appropriate or correct solutions through the exercise of routines, the application of formulas or algorithms, the application of procedures for the transformation of available information and the interpretation of results. It is usually used as a complement to the master class.
Autonomous problem solving	Activity in which problems and / or exercises related to the subject are formulated. The student must develop the analysis and resolution of problems and / or exercises independently.
Mentored work	The student, individually or in groups, prepares a document on the subject or prepares seminars, research, reports, essays, summaries of readings, lectures, etc.

### **Personalized assistance**

<b>Methodologies</b>	<b>Description</b>
Lecturing	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.
Debate	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.
Case studies	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.
Collaborative Learning	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.
Laboratory practical	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.
Problem solving	In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.

Autonomous problem solving In addition to the attention to students in the established tutorials and depending on the topic to be dealt with, students will also be attended through email and the remote campus platform (online) at the times available and agreed by both parties. Personalized attention will aim to answer any questions that may arise regarding the subject and/or advise on academic and professional matters in those cases that so request.

<b>Assessment</b>						
	Description	Qualification	Training and Learning Results			
Case studies	Analysis of a fact, problem or real event in order to know it, interpret it, solve it, generate hypotheses, compare data, reflect, complete knowledge, diagnose it and train in alternative solution procedures. Learning outcomes: RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8, RA9, RA10	30	A2 A5	B1 B4	C6 C9 C16 C19 C20 C21 C24	D1 D2
Problem solving	Prueba en la que el alumno debe resolver una serie de problemas y/o ejercicios en uno tiempo/condiciones establecidas por el profesor. De esta manera, los estudiantes deben aplicar la conocimientos que has adquirido. Resultados de aprendizaje: RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8, RA9, RA10.	30	A2 A5	B1 B4	C6 C9 C16 C19 C20 C21 C24	D1 D2
Mentored work	Students in small groups prepare a document on a relevant and interesting topic related to the subject.  Learning outcomes: LO4, LO5, LO6, LOA7.	5	A2 A5	B1 B4	C16 C19 C20 C21 C24	D1 D2
Presentation	Presentation and defense of the supervised work will be valued. Learning outcomes: LO11	5	A2			D1 D2
Portfolio / dossier	Compilation of the student's work in the practices with the aim of showing their effort, progress and achievements in their learning. Students will collect information and data in the practices that they will expand with documentation and information on which they will reflect, solving the questions raised in the practice. Learning results: RA6, RA7, RA,8, RA9, RA10, RA11.	20	A2		C6 C9 C16 C19 C20 C21 C24	D1 D2
Systematic observation	Learning and actions will be evaluated and how they are carried out, assessing order, precision, skill, effectiveness, active participation, etc. Learning outcomes: RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8, RA9, RA10, RA11.	10	A2 A5	B1 B4	C6 C9 C16 C19 C20 C21 C24	D1 D2

### **Other comments on the Evaluation**

Two evaluation systems are established for the first opportunity: continuous evaluation and global evaluation. The default evaluation of each student, in the first opportunity of this subject, is the continuous evaluation.

**In order for a student to be eligible for the overall assessment of this subject at the first opportunity, they must renounce the continuous assessment system for this subject and adhere to the overall assessment system for this subject, in accordance with the procedure and deadlines established by the center.**

The evaluation of each student, in the second opportunity and in the final call for this subject, will be carried out by means of a global evaluation.

Continuous assessment:

The continuous evaluation will be carried out through different activities that must be carried out within the deadlines established at the beginning of the teaching and that will be published on the moovi platform. In the presentation of the subject, all the information related to the continuous evaluation will be detailed. It is the student's obligation to collect all the necessary information to be able to follow the continuous evaluation in accordance with the instructions given by the teacher at the beginning of the subject.

Continuous evaluation will be carried out through the following activities:

- Practical case (30%): It will consist of different activities related to the theoretical and practical contents of the subject.
- Problem solving (30%): It will consist of different activities related to the theoretical and practical contents of the subject.
- Portfolio/file (20%): students will deliver a portfolio in which they will make a record of the practice as well as the interpretation of the information collected and will add/complete it with the related documentation, in addition to answering and reflecting on issues raised in the practice.
- Systematic observation (10%): Active participation in class and through the forums set up on the moovi platform will be valued. The degree of contribution made in each case and its relevance will be taken into account.
- Elaboration of the theme work - manuscript - (5%)
- Presentation and defense of the work of the subject (5%)

### **General evaluation:**

The official exam dates are published on the center's website <http://fisioterapia.uvigo.es/gl/> and on the subject's moovi platform <https://moovi.uvigo.gal/>.

Theoretical contents:

- Theoretical exam (40%): The theoretical exam will consist of 5 development questions related to the theoretical content of the subject.

Practical contents:

- Laboratory practices (20%): In the practical test, the student must perform and interpret different tests/cardiovascular evaluation tests.
- Practical case (40%): in the exam the student must explain the meaning and perform a clinical interpretation of the data from a cardiac assessment as well as design an exercise program adjusted to the assessment of a clinical case for a training program. Cardiac Rehabilitation.

To pass the subject it is necessary to pass the theoretical exam (minimum score of 5 on the scale from 0 to 10) and the case study (minimum score of 5 on the scale from 0 to 10) separately.

### **Considerations:**

Students taking this course are required to conduct themselves in a responsible and honest manner. Any form of fraud (that is, copying and/or plagiarism) tending to falsify the level of knowledge or ability reached by a student in any type of test, report or work designed for that purpose is considered inadmissible. Fraudulent conduct may result in suspension from the course for the entire course. An internal record of these actions will be kept so that, in the event of recidivism, the rectory is asked to open a disciplinary file.

Ethical commitment:

Students must display appropriate ethical behavior. In the case of unethical conduct (copying of seminars, plagiarism of work, use of unauthorized electronic equipment, etc.) that prevents the correct development of the teaching activity, it will be considered that the student does not meet the necessary requirements to pass the subject. . . subject, and in this case your grade will be suspended in the current academic year (0.0). The use of any electronic device will not be allowed during the evaluation tests unless expressly authorized. The fact of introducing an unauthorized electronic device into the examination room will be considered a reason for the suspension of the subject in the current academic year and the overall mark (0.0) will be suspended.

Image and/or audio recording: it will not be allowed, except with the express authorization of the teacher, the recording, total or partial, both sound and image, of master classes, seminars or practices of the subject, in accordance with the provisions of the Intellectual Norms. Heritage Law, Organic Law on Protection of Personal Data and Organic Law on Civil Protection of the Right to Honor.

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American Association of Cardiovascular & Pulmonary Rehabilitation, **AACVPR Cardiac Rehabilitation Resource Manual**, 1, Human Kinetics, 2006

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Peter L. Thompson, **Coronary Care**, 2, Elsevier, 2011

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Nathan Wong, Ezra Amsterdam, **ASPC Manual of Preventive Cardiology**, 1, Demosmedical, 2015

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## Recommendations

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### Subjects that it is recommended to have taken before

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Human anatomy: Medical-surgical conditions/P05G171V01107

Human anatomy: Human anatomy/P05G171V01101

Physiology: Human physiology/P05G171V01102

Human anatomy: Medical conditions/P05G171V01201

Human anatomy: Surgical conditions/P05G171V01202

Kinesitherapy/P05G171V01203

Cardiorespiratory Physical Therapy/P05G171V01302

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**IDENTIFYING DATA****Occupational Physical Therapy and Ergonomics**

Subject	Occupational Physical Therapy and Ergonomics			
Code	P05G171V01313			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Nóvoa Castro, Borja			
Lecturers	Nóvoa Castro, Borja			
E-mail	borja@uvigo.es			
Web				
General description	The *ergonomía is the group of knowledges of multidisciplinary character applied stop the *adecuación of the products, systems and artificial surroundings to the needs, limitations and characteristics of the his users, optimising the #efficacy, security and welfare. In the labour field commissions of the design of workplaces, tools and tasks, so that they coincide with the physiological characteristics, *anatómicas, psychological and the capacities of the hard-working that will see *involucrados. The labour physiotherapy boards the attention to the health in the labour pathology and preventive aspects.			

**Training and Learning Results**

Code	
A2	Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
C2	Understand the principles of biomechanics and electrophysiology, and their main applications in the field of physical therapy.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C15	Understand ergonomic and anthropometric principles.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C18	Encourage the participation of the user and family in their recovery process.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C24	Promote healthy lifestyle habits through health education.
D1	Ability to communicate orally and in writing in Galician.
D2	Computer skills related to the field of study
D7	Maintain an attitude of learning and improvement.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results		
Make in group, or individually, expose and defend a work on a subject related with the ergonomics in the field of the sciences of the health	A2	B1	C2 C13 C15 C20 C24
Define the elementary bases of the ergonomics and his relation with the *biomecánica	A2		C2 C15
Describe and differentiate the main alterations and peculiarities of an environment of work, sportive and domiciliary that can carry to ergonomic alterations	A2		C2 C13 C15 C24
Describe the main existent resources (instrumental, temporary, *actitudinal) for the modification of an environment of face to promote the ergonomics	A2		C2 C13 C15 C24

Pose and describe the most adapted boarding in individual situations or *grupales of face to promote the ergonomics in a determinate environment (professional, *domiciliar or sportive)	A2	B1	C13 C15 C20 C24	D1 D2 D7
Describe and differentiate the main forms of evaluation of the modifications made and of the effects attained in a determinate environment of face to the promotion of the health	A2	B1	C13 C15 C16 C18 C24	D1 D7

## Contents

Topic	
Introduction to the ergonomics	Concept of ergonomics and general aims of the ergonomics.
*Antropometría	Dimensional design of places of work and systems
Ergonomic methodology	Evaluation and boarding of disorders muscle-skeletal (repetitive movements, movement of loads, postures forced)
Hygiene *postural	Hygiene *postural in the labour field, school and activities of the daily life
Ergonomics in the labour environment	Recommendations in the design of activities with computer, works in *sedestación,...
Car-prevention	Ergonomics applied to the profession of physiotherapy and other sanitary professions. Prevention of injuries muscle -skeletal in the profession.
Pathologies *musculo-skeletal more frequent in the field of the ergonomics	Study of the pathologies muscle-skeletal that evaluate and warn in the field of the ergonomics (repetitive movements, handle of loads, postures forced,...)
Labour physiotherapy	The profession of the *fisioterapeuta in the field of the company and of the ergonomics
Evaluation of the physical load in labour environment, sportive and of the daily life	Methods of evaluation

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	33	62	95
Problem solving	8	0	8
Mentored work	4	23	27
Introductory activities	1	0	1
Essay questions exam	1	9	10
Essay	1	0	1
Problem and/or exercise solving	8	0	8

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	The theoretical classes will be participatory and will use the didactic query, debate, study of cases and strategies of resolution of problems. During these theoretica sessions will be able to develop exercises that, to be surpassed by the/the student/to, discount matter in the proofs of evaluation.
Problem solving	During these theoretical sessions will develop exercises of resolution of problems, that to be surpassed by the/the student/to, disscout theoretical matter in the proofs of evaluation of theoretical lesson and will mark in the section of corresponding Evaluation
Mentored work	The/the student/to will make a work related with the syllabus of the matter. This will be able to be individual or in group and has to be agreed with the/the professor/to. The students will make exhibition of the work in front of the/the educational and other mates/you of the work.
Introductory activities	Activities directed to take contact and gather information on the students, as well as to present the matter

## Personalized assistance

Methodologies	Description
Lecturing	They will tackle necessary contents for the preparation of the work. They will tackle the contents of the proofs of evaluation
Mentored work	warded The preparation of the work
Problem solving	warded The resolution of the problems

<b>Assessment</b>						
	Description	Qualification	Training and Learning Results			
Lecturing	Examination of questions of development: The examination will consist in questions with answer of development. The/the students/those that do not participate or surpass the activities carried out during the theoretical sessions along the course "Resolution of problems or exercises" will be able to present the this tests with the theoretical matter of these subjects and recover the qualification of this section	40	A2	B1	C2 C13 C15 C16 C18 C20 C24	D1 D2 D7
Problem solving	During the theoretical sessions along the course will make exercises in the classroom on the syllabus given. The students that do not surpass these proofs the can recover by means of examination of questions of corresponding development in the theoretical examination.	40	A2	B1	C2 C13 C15 C16 C18 C20 C24	D1 D2 D7
Mentored work	The realisation, assistance to tutorials, exhibition and defence of the work is compulsory to surpass the matter. They will value the participation in the tutorials of the work, the approach and the analysis made, as well as the editorial and the utilisation of bibliographic sources. It will value the presentation of the work in audiovisual means and his exhibition and defence.	20	A2	B1	C2 C13 C15 C16 C18 C20 C24	D1 D2 D7

### **Other comments on the Evaluation**

In order to be able to take the theoretical exam, it is mandatory to complete, attend tutorials, present and defend the work on the dates established at the beginning of the teaching of the subject.

In order to pass the subject, it is mandatory to pass the grade of the work by 50% on the one hand, and examination of development questions plus problem solving exercises on the other.

CONTINUOUS ASSESSMENT: During the master sessions, practical exercises will be proposed on the topic explained. The student must submit the well-completed exercise at the end of the class. In addition to scoring in the continuous assessment section, the theoretical subject in the examination of development questions will be discounted.

GLOBAL ASSESSMENT (waiver of continuous assessment): Examination of development questions of the entire syllabus taught. Students who pass each problem-solving exercise will not be asked about the syllabus for that exercise.

SECOND OPPORTUNITY ASSESSMENT: Students who do not pass the subject will be kept the passed part for the second call within the academic year.

### **Sources of information**

#### **Basic Bibliography**

Falzón, P., **Manual de Ergonomía**, Modus Laborandi, 2009

Llaneza Álvarez, J., **Ergonomía y psicología aplicada: manual para la formación del especialista.**, Lex Nova, 2009

Azcuenaga Linaza, L.M., **Accidentes laborales y enfermedades profesionales: análisis, riesgos y medidas preventivas.**, Fund. Confemetal, 2010

Llorca Rubio, J.L., **Manual de ergonomía aplicada a la prevención de riesgos laborales.**, Piramide, 2015

Revista de Biomecánica, **Revista de Biomecánica**, Instituto Biomecánico de Valencia,

#### **Complementary Bibliography**

### **Recommendations**

#### **Subjects that continue the syllabus**

Physical therapy in clinical specialties I/P05G171V01308

Physical therapy in clinical specialties II/P05G171V01309

#### **Subjects that it is recommended to have taken before**

Human anatomy: Human anatomy/P05G171V01101

Physiology: Functional movement in physiotherapy/P05G171V01105

Physiotherapy evaluation/P05G171V01108

Kinesitherapy/P05G171V01203



**IDENTIFYING DATA****Cranio-Cervical Mandibular Physical Therapy**

Subject	Cranio-Cervical Mandibular Physical Therapy			
Code	P05G171V01314			
Study programme	Grado en Fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	Spanish			
Department				
Coordinator	Rodil Gargallo, María			
Lecturers	Rodil Gargallo, María			
E-mail	marialugo.pontevedra@hotmail.com			
Web				
General description	(*)Na materia en Fisioterapia cérvico-cráneo-madibular, estúdase en profundidade a anatomía da rexión, as patoloxías e técnicas de tratamento.			

**Training and Learning Results**

Code	
B1	To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.
B3	Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.
C6	Identify anatomical structures as a basis of knowledge to establish relationships dynamically with the functional organization.
C13	Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.
C14	Understand and apply the manual and instrumental methods and procedures of assessment in Physical Therapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.
C16	Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.
C19	Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.
C20	Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.
C21	Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.
C34	To know and understand the morphology, physiology, pathology and behavior of people, both healthy and sick, in the natural and social environment.
C38	Intervene in the areas of health promotion, prevention, protection and recovery.
D1	Ability to communicate orally and in writing in Galician.
D7	Maintain an attitude of learning and improvement.

**Expected results from this subject**

Expected results from this subject	Training and Learning Results
Identify anatomical structures as a basis of knowledge to establish relationships dynamically with the functional organization.	C6 C34
To know and understand the morphology, physiology, pathology and behavior of people, both healthy and sick, in the natural and social environment.	
Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same.	C13 C34
To know and understand the morphology, physiology, pathology and behavior of people, both healthy and sick, in the natural and social environment.	

To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.	B1 B3	C13 C14 C16 C19	D7
Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.		C20 C21 C38	
Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same. Understand and apply the manual and instrumental methods and procedures of assessment in Physical Therapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.			
Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.			
Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.			
Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.			
Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.			
Intervene in the areas of health promotion, prevention, protection and recovery.			
<u>Maintain an attitude of learning and improvement.</u>			
To know how to work in professional teams as a basic unit in which professionals and other personnel of health care organizations are structured in a uni or multidisciplinary and interdisciplinary way.	B1	C13 C14 C16 C19 C20 C21 C38	D1 D7
Have the ability to assess from the perspective of physiotherapy, the functional status of the patient/user, considering the physical, psychological and social aspects of the same. Understand and apply the manual and instrumental methods and procedures of assessment in Physical Therapy and Physical Rehabilitation, as well as the scientific evaluation of their usefulness and effectiveness.			
Analyze, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.			
Understand and perform specific methods and techniques related to the locomotor system (including manual therapies, joint manipulative therapies, osteopathy and chiropractic), neurological processes, respiratory system, cardiocirculatory system and static and dynamic alterations. Specific methods and techniques that take into account the implications of orthopedics in physiotherapy, reflex therapeutic techniques, as well as other alternative and/or complementary methods and techniques whose safety and efficacy is demonstrated according to the state of development of science.			
Identify the most appropriate physiotherapeutic treatment in the different processes of alteration, prevention and health promotion as well as in the processes of growth and development.			
Identify the situation of the patient/user through a physiotherapy care diagnosis, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.			
Intervene in the areas of health promotion, prevention, protection and recovery.			
Ability to communicate orally and in writing in Galician.			
<u>Maintain an attitude of learning and improvement.</u>			

## Contents

Topic	
- Anatomy, physiology and biomechanics of the cervico-cranio-mandibular complex	- Anatomy and physiology of the cervical, cranial and mandibular area. - Relationship with other anatomical structures. - Correct biomechanics of the joint complex
-Pathologies of the cervical-cranio-mandibular complex	- Traumatic, discal, degenerative pathologies,.. - Origin of the pathology. - Differential diagnosis.
-Physical and radiological assessment of the cervico-cranio-mandibular complex	- Interpretation and analysis of pathology in radiological imaging or magnetic resonance.
-Treatment of pathologies of the cervical-cranio-mandibular complex	- Realization of the treatment plan for a patient with problems at the FCCM level through education, manual therapy, therapeutic exercise and other guidelines given by multidisciplinary work with other professionals in dentistry and medicine. - Treatment techniques. - Referrals to other professionals and multidisciplinary work.

## Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	21	56	77
Laboratory practical	16	37	53
Mentored work	1	14	15
Introductory activities	2	0	2
Essay questions exam	1	0	1
Laboratory practice	1	0	1
Essay	1	0	1

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

	Description
Lecturing	Presentation of the contents by the teacher. Theoretical sessions include problem-solving activities and case studies.
Laboratory practical	Demonstration by the teaching staff of the assessment and/or treatment techniques that the students will carry out in pairs under the supervision of the teaching staff.
Mentored work	The work will be done individually. It will consist of the delivery of a dossier that will be composed of a series of activities that will be carried out inside and outside the classroom.
Introductory activities	The teaching staff will present the subject to the students and gather information about them (previous knowledge, interests of the students,..).

## Personalized assistance

Methodologies	Description
Lecturing	The personalized attention will be focused on the resolution of doubts that students may have in relation to the subject through * face-to-face tutorías, email and / or remote campus.
Laboratory practical	The personalized attention will be focused on the resolution of doubts that students may have in relation to the subject through face-to-face tutorials, email and / or remote campus.
Mentored work	The personalized attention will be focused on the resolution of doubts that students may have in relation to work through face-to-face tutorials, email and / or remote campus.
Introductory activities	The personalized attention will be focused on the resolution of doubts that the students may have in relation to the organization of the subject.

## Assessment

	Description	Qualification	Training and Learning Results
Essay questions exam	Development Question Exam	40	C14 D1 C16 C19 C20 C21 C34



Laboratory practice	Demonstration and/or explanation of treatment techniques and/or assessment of the cervical-cranio-mandibular complex	40	B1 B3	C6 C13 C14 C16 C19 C20 C21 C34 C38	D1 D7
Essay	The completion and delivery of the work is mandatory	20	B1 B3	C13 C14 C16 C19 C20 C21 C38	D1 D7

### Other comments on the Evaluation

**Continuous evaluation:** to follow this evaluation it is essential to attend 80% of the practical classes and present a work (mandatory presentation to pass the subject). In this case, the theoretical exam will take place in the school period indicated in the schedule (40%), the practical one in ordinary call (40%).

For those students who decide **NOT to follow the continuous evaluation:** in the first place, they must communicate it through the appropriate channels the choice of this type of evaluation. In this case, **global evaluation**, absences will NOT be penalized and they should NOT do the work. Its evaluation would be 50% theoretical exam development questions and 50% resolution of practical cases, both in ordinary call.

To pass the subject, you must have passed the theoretical and practical exam at 50% each.

To take the practical exam it is mandatory to take the theoretical exam.

Students who have one of the approved parts are saved the part passed for the next call within the same academic year.

### Sources of information

#### Basic Bibliography

Fernandez de las Peñas C.; Mesa J., **Trastornos de la articulación Temporomandibular. Terapia manual, ejercicio y técnicas invasivas**, 9788491105442, 1º, Editorial Medica Panamericana, 2019

Pérez Fernández T.; Parra González A., **Fisioterapia en el trastorno temporomandibular**, 9788491132837, 1º, Elsevier, 2019

Okeson J., **Tratamiento de oclusión y afecciones temporomandibulares**, 9788491135197, 8ª, Elsevier, 2019

#### Complementary Bibliography

Ricard F., **Tratado de osteopatía craneal: articulación temporomandibular**, 9788494112225, 3ª, Medos Editorial, 2014

Maglione, H., **Disfunción craneomandibular: afecciones de los músculos masticatorios y ATM. Dolor orofacial**, 9789585426740, 2ª, Amolca, 2018

### Recommendations

#### Subjects that it is recommended to have taken before

Human anatomy: Human anatomy/P05G171V01101

Physiotherapy evaluation/P05G171V01108

Manual Therapy/P05G171V01206