



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			
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Web				

General description (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 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. 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. 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.

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 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			
Essay questions exam	Half of the theoretical exam will consist of developmental questions.	20	A2	B3	C7 C9 C13 C36 C38	D1 D7
Essay	The completion, attendance to tutorials and delivery of all the documentation for the of the work is mandatory. The participation in the tutorials will be valued, as well as the the paper, as well as its writing and the use of bibliographic sources of high scientific impact. high scientific impact. In case of not doing the work or not delivering the corresponding documentation, the subject will be documentation, the subject will not be passed.	20	A2	B3	C7 C9 C13 C14 C15 C16 C18 C36 C38	D1 D7
Simulation or Role Playing	There will be a practical exam in which the students will have to execute the methods and techniques methods and techniques covered throughout the course. The practical The practical questions will be randomly assigned within the set of treatment methods and treatment techniques that were done throughout the course. The student must have knowledge of all the methods and techniques addressed in the course. In order to take the practical exam, students must first take the theoretical exam first take the theoretical exam.	40	A2	B3	C7 C9 C13 C14 C15 C16 C18 C36	D1 D3 D7 D8
Objective questions exam	In order to pass the examination, a grade of 5 out of 10 must be obtained in the examination of objective questions. This type of exam includes closed-ended questions with different answer alternatives alternative answers (true/false, multiple choice, item matching,...), matching of elements,...). Incorrect questions will be penalized.	20	A2	B3	C7 C9 C13 C36 C38	D1 D7

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.

Sources of information

Basic Bibliography

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Smith, C. ; Dille, A.; Mitchell, B.; Drake, R., **GRAY Anatomía de Superficie y Técnicas Ecográficas. Bases para la Práctica Clínica**, ELSEVIER, 2021

Bové, T., **El Vendaje Funcional**, ELSEVIER, 2021

Loukas, M.; Burns, D., **Anatomía por Ecografía. Fundamentos**, WOLTERS KLUWER, 2020

Iriarte, I.; Pedret, C.; Balius, R.; Cerezal, L., **Ecografía Musculo-esquelética. Exploración Anatómica y Patología**, Editorial Medica Panamericana, 2020

Lederman, E., **Functional Exercise Prescription. Supporting Rehabilitation in Movement and Sport**, Handspring, 2022

Justo Cousiño; LA, **El reto de la especialización en fisioterapia en España**, FEM: Revista de la Fundación Educación Médica, 2019

Romero, R. D. ; Tous, F. J., **Prevención de lesiones en el deporte: Claves para un rendimiento óptimo**, Editorial Medica Panamericana, 2010

Kumbrink, B., **La guía ilustrada del K-taping: Principios básicos - técnicas - indicaciones.**, Paidotribo, 2015

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Sijmonsma, J., **Taping neuro muscular: Manual.**, Aneid Press, 2014

Potach, D., Meira, E., **Sport injury prevention anatomy.**, Human Kinetics, 2023

Complementary Bibliography

Beam Joel, **Orthopedic Taping, Wrapping, Bracing, and Padding**, F.A. DAVIS, 2021

Crossley, J., **Functional Exercise and Rehabilitation. The Neuroscience of Movement, Pain and Performance**, ROUTLEDGE, 2021

Shumway-Cook, A.; Woollacott, M., **Motor Control. Translating Research into Clinical Practice. International Edition**, WOLTERS KLUWER, 2022

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Salom, J., **Readaptación tras las Lesiones Deportivas. Un Tratamiento Multidisciplinar Basado en la Evidencia**, Editorial Medica Panamericana, 2020

Rodríguez, H. C.; Ayala, M. J. D., **Lesiones crónicas del tobillo en el deporte.**, Editorial Medica Panamericana, 2015

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Starkey, C, **Patología ortopédica y lesiones deportivas: Guía de examen.**, Editorial Medica Panamericana, 2012

Seco, C. J, **Métodos específicos de intervención en fisioterapia.**, Editorial Medica Panamericana, 2016

Recommendations

Subjects that are recommended to be taken simultaneously

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

Human anatomy: Medical conditions/P05G171V01201

General physiotherapy I/P05G171V01204
