



IDENTIFYING DATA

(*)Bases anatomofuncionais no exercicio terapéutico

Subject	(*)Bases anatomofuncionais no exercicio terapéutico			
Code	P05M191V01101			
Study programme	Máster Universitario en Ejercicio terapéutico en fisioterapia			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	3	Mandatory	1st	1st
Teaching language	Spanish			
Department				
Coordinator	Padín Iruegas, María Elena			
Lecturers	Durán Barbosa, Rafael Justo Cousiño, Lorenzo Antonio Padín Iruegas, María Elena			
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Web				
General description	In this subject will tackle the implications that has the exercise in the anatomy and in the Physiology of the human body			

Training and Learning Results

Code	
A5	That students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.
B6	Develop learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.
C1	Incorporate scientific research and evidence-based practice as a professional culture in the practice of therapeutic exercise.
C9	Understand the complexity of the effects of therapeutic exercise at the cardiovascular, respiratory, endocrine, neurological and skeletal muscle levels in different population groups.
D1	Ability to understand the meaning and application of the gender perspective in the different fields of knowledge and in professional practice with the aim of achieving a fairer and more equal society.
D4	Knowledge of statistics applied to Health Sciences, or to the field of study related to the field of study.
D8	Maintain an attitude of learning and improvement.

Expected results from this subject

Expected results from this subject	Training and Learning Results
Knowledges the concepts advanced of Kinesitherapy and therapeutic exercise.	A5 B6 C1 C9 D1 D4 D8
Know the effects that the exercise has on the device locomotor.	A5 B6 C1 C9 D1 D4 D8

Identify the morphology and physiology changes induced by the exercise.	A5 B6 C1 C9 D1 D4 D8
Know the clinical applications of the exercise and his pathological limitations	A5 B6 C1 C9 D1 D4 D8
Know apply properly the knowledges of the anatomy of the knee, the anatomy of the shoulder and the anatomy of the vertebral column for the prescription of the therapeutic exercise.	A5 B6 C1 C9 D1 D4 D8
Study the physiological mechanisms of adaptation to the physical exercise, as well as the energetic answers, muscular, cardiovascular and respiratory.	A5 B6 C1 C9 D1 D4 D8

Contents

Topic	
Anatomy and Exercise	1- Concepts advanced. 2- Effects of the physical exercise in the device locomotor 3- anatomical Changes-physiological induced by the physical exercise 4- The shoulder 5- The knee 6- Column
Physiology	7- Introduction: The Physiology and the Exercise 8-metabolic Appearances of the exercise. 9-muscular Answers to the exercise. 10-cardiovascular Answer to the exercise. 11-respiratory Answer to the exercise. 12-Other sistematic answers to the exercise. 13-Other appearances related with the exercise.

Planning

	Class hours	Hours outside the classroom	Total hours
Lecturing	15	21	36
Problem solving	5	10	15
Objective questions exam	1	5	6
Essay	1	10	11
Objective questions exam	1	5	6
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
Lecturing	The lecturers structures and/or explains the contents of the subject.
Problem solving	Activity in which they formulate tasks related with the subject of individual way and/or collective

Personalized assistance

Methodologies	Description
Lecturing	Orientation to the students and resolution of doubts on the contents of the matter by means of tutorships face-to-face way, email and/or remote campus.

Problem solving Orientation to the students and resolution of doubts on the contents of the matter by means of tutorships face-to-face way, email and/or remote campus.

Tests	Description
Essay	Orientation to the students and resolution of doubts on the work of the matter by means of tutorships face-to-face way, email and/or remote campus.

Assessment						
	Description	Qualification	Training and Learning Results			
Objective questions exam	Exam of objective questions of 5 options without negative qualification. To pass the theoretical exam it is necessary to obtain 70% of the correct answers	40	A5	B6	C1 C9	D1 D4 D8
Essay	Realisation of a work of individual form or in group	10	A5	B6	C1 C9	D1 D4 D8
Objective questions exam	Exam of objective questions in which every two wrong answers will be deducted one point.	40				
Systematic observation	Class attendance and participation in them will be valued. Attendance at 80% of classes is required.	10	A5	B6	C1 C9	D1 D4 D8

Other comments on the Evaluation

Evaluation systems:

Part Anatomy and Exercise: the theoretical knowledge acquired by the students will be evaluated by means of an exam of objective questions of 5 options without negative qualification. To pass the theoretical exam it is necessary to obtain 70% of the correct answers; It is necessary to pass the theoretical exam to pass the subject. Carrying out a job will be 10%. It is necessary to present it to pass the subject.

Physiology Part: Exam of objective questions in which every two wrong answers will be deducted one point.

The work will consist of the following parts: introduction, problem statement, descriptive analysis and conclusions. It can be done individually or in a group

The same criteria will be maintained in successive calls.

Students may request the waiver of continuous assessment by informing the coordinator of the subject within the established period.

To pass the subject, students must have independently passed all the evaluation sections and have attended 80% of the practical classes. The non-attendance to the practices supposes the loss to the continuous evaluation.

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

In any of the calls, if the students obtain a numerical grade greater than 5, but do not meet the requirements established to pass the subject, they will have a grade of 4.5 (failed). In case of lower grades, the grade obtained will be given

Sources of information

Basic Bibliography

-Jürgen Weineck: **Anatomía Deportiva**, 5ª,
 Mario Lloret Riera, **Anatomía Aplicada a la Actividad Física y Deportiva**,
 -Michel Dufour, **Biomecánica Funcional. Miembros, Cabeza, Tronco**, 2ª, 2018
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 Alberto Manuel Ángeles Castellanos, **Morfología Humana**, Panamericana, 2022
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 Kraemer W. J. Fleck S. J. & Deschenes M. R, **Fisiología del ejercicio: teoría y aplicación práctica**, 3, Wolters Kluwer., 2022

McArdle W. D. Katch F. I. & Katch V. L, **Fisiología del ejercicio: nutrición rendimiento y salud**, 8, Wolters Kluwer Health España., 2015

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Costanzo L. S, **Fisiología**, 8, Wolters Kluwer., 2023

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López-Chicharro, J.; Fernández-Vaquero, A., **Fisiología del Ejercicio**, 4, Elsevier., 2022

Kraemer, **Fisiología del Ejercicio**, Lippincott Williams & Wilkins, 2022

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Åstrand, Per-Olof, **Manual de fisiología del ejercicio**, Paidotribo., 2010

Complementary Bibliography

Recommendations

Other comments

Give of high in *MOOVI (is the first time that does , the name of user and the password is the *DNI). Have a direction of direction-and, as every time that it give a warning, go up documentation, etc., will communicate by this road the all the users of the matter (students and educational).