



## IDENTIFYING DATA

### Anatomy: Human Anatomy and kinesiology

Subject	Anatomy: Human Anatomy and kinesiology			
Code	P02G050V01201			
Study programme	(*)Grao en Ciencias da Actividade Física e do Deporte			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Basic education	1st	2nd
Teaching language				
Department				
Coordinator	García García, Óscar			
Lecturers	García García, Óscar García Remeseiro, Tania			
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Web				
General description				

## Competencies

Code	
B2	Knowledge and comprehension of the scientific literature of the area of the physical activity and the sport.
B3	Knowledge and compression of the physiological factors and biomechanics that determine the practice of the physical activity and the sport
B7	Knowledge and comprehension of the foundations, structures and functions of the skills and bosses of the motricity humanizes.
B8	Knowledge and comprehension of the structure function and development of the different manifestations of the motricity humanizes.
B11	Knowledge and comprehension of the ethical beginning necessary for the correct professional exercise.
B13	Habits of excellence and quality in the professional exercise.
B14	Managing of the scientific basic information applied to the physical activity and to the sport in his different manifestations.
B18	Aptitude to apply the physiological beginning, biomechanics, behavioral and social, to the different fields of the physical activity and the sport.
B20	Aptitude to identify the risks that stem for the health of the practice of physical inadequate activities.
B23	Aptitude to select and to be able to use the material and sports equipment adapted for every type of activity.
B26	Adjustment to new situations, the resolution of problems and the autonomous learning.
C1	Aptitude to design, to develop and evaluate the processes of education - learning relative to the physical activity and the sport with attention to the individual and contextual characteristics of the persons.
C3	Aptitude to apply the physiological and biomechanical skills, comportamentales and social, in the offer of tasks in the processes of education - learning across the physical activity and sport.
C4	Aptitude to identify the risks that stem for the health of the students due to the practice of inadequate physical activities .
C7	Aptitude to plan, to develop and control the process of training in the different levels
C8	Aptitude to apply the physiological biomechanical, comportamental and social principles, during the process of the sports training
C11	Aptitude to plan, to develop and to control the accomplishment of programs of sports training

## Learning outcomes

Expected results from this subject	Training and Learning Results
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The student has to be able to know the characteristics of the physical exercise systematised, criteria for his classification, specific terminology and graphic representation of the same.	B2	C1
	B7	C3
	B8	C8
	B14	
	B20	
The student has to be able to know the application of the exercise with the purpose of development of the qualities *psicofísicas.	B23	
	B11	C3
	B13	C4
	B14	C7
	B18	C8
	B20	C11
	B23	
The student has to be able to comprise the mechanical and physiological dimension of the corporal movement analysing it from the articular and muscular points of view.	B26	
	B3	C1
	B7	C3
	B8	C8
	B18	

## Contents

### Topic

Subject 1. The corporal movement and the physical exercise. Concept and purpose. Different approaches in the application of the exercise.	<input type="checkbox"/> Corporal movement. <input type="checkbox"/> Tasks *motrices.
Subject 2. Foundations of realisation *motriz. Mechanisms involved in the action *motriz. Factors in the execution of the movements.	- Mechanisms involved in the action *motriz. - Factors in the execution of the movements.
Subject 3. Formal characteristics of the physical exercise.	<input type="checkbox"/> Intensity <input type="checkbox"/> Intention <input type="checkbox"/> Forms <input type="checkbox"/> Technical
Subject 4. Articular movements	- Movements that can effect each articulation of the human body. - Degrees of amplitude. - Flat and axes of orientation of the movement.
Subject 5. Analysis of positions and of movements of simple mechanics and of complex mechanics.	- Movements of simple mechanics. - Movements of complex mechanics.
Subject 6. Study of the muscular action in the exercises.	- Types of muscular contraction. - Actions and functions of the muscles. - Conjoint participation of the muscles in the movement. - Influence of the gravity and of other external strengths on the muscular action.
Subject 7. Analysis of positions and of movements of simple mechanics and of complex mechanics attending to the muscular participation.	- Analysis of movements of simple mechanics: *participación muscular - Analysis of movements of complex mechanics: muscular participation
Subject 8. The basic physical qualities. Effects in the organism.	<input type="checkbox"/> Concept and classes of basic physical qualities. <input type="checkbox"/> Concept and factors of physical conditioning. <input type="checkbox"/> Adaptative processes to the physical exercise. <input type="checkbox"/> *Periodización Of the practice of the physical exercise. <input type="checkbox"/> Evolution of the capacities *motrices. <input type="checkbox"/> Foundations for the development of the physical condition.
Subject 9. Demonstration, development and assessment of the dependent capacities of the device *locomotor.	<input type="checkbox"/> The strength. Concept, classes and diverse classifications. <input type="checkbox"/> Systems of development of the strength. <input type="checkbox"/> Assessment of the muscular strength. <input type="checkbox"/> The speed: concept, classes and factors of which depends. <input type="checkbox"/> The flexibility: concept and factors of which depends. <input type="checkbox"/> Systems of development: dynamic and static.
Subject 10. Demonstration, development and assessment of the dependent capacities of the processes of obtaining and utilisation of energy.	<input type="checkbox"/> The resistance. Concept and classes. <input type="checkbox"/> Systems of acquisition of the resistance. <input type="checkbox"/> Assessment of the resistance.
Subject 11. Qualities *psicomotoras related with the muscular action.	<input type="checkbox"/> Concept and classes of qualities *psicomotoras. <input type="checkbox"/> The coordination. Concept and types, according to the different criteria: <input type="checkbox"/> Forms of development of the coordination. <input type="checkbox"/> The balance. Concept and classifications.

## Planning

	Class hours	Hours outside the classroom	Total hours
Laboratory practises	28	25	53
Troubleshooting and / or exercises	5	5	10
Presentations / exhibitions	1	1	2
Master Session	16	18	34
Multiple choice tests	0.5	30	30.5
Practical tests, real task execution and / or simulated.	0.5	20	20.5

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

### Methodologies

	Description
Laboratory practises	In the schedule of practices of laboratories will develop tasks and exercises directed by the professor on appearances presented in the theoretical classes.
Troubleshooting and / or exercises	The theoretical concepts will be accompanied in the theoretical classes with exercises and resolution of problems.
Presentations / exhibitions	They will present studies of cases so that student can have references
Master Session	It will use the exhibition by part of the professor like half main of education.

### Personalized attention

Methodologies	Description
Master Session	It will try attend of form *individualizada to the students, recognising his particular problems.
Laboratory practises	It will try attend of form *individualizada to the students, recognising his particular problems.
Troubleshooting and / or exercises	It will try attend of form *individualizada to the students, recognising his particular problems.

### Assessment

	Description	Qualification	Training and Learning Results
Laboratory practises	It is compulsory to assist at least to 80% of the practices to be able to obtain a positive evaluation	0	B11 C1 B14 C3 B20 B26
Troubleshooting and / or exercises	They will review the exercises realised by the students in the practices of laboratory. It is compulsory to realise all the exercises proposed in the classes	10	B13 C1 B14 C4 B18 C8 B23 C11 B26
Multiple choice tests	It realised an examination type test of only answer, on 5 possible, where is necessary to obtain at least a 60 percent of correct answers, taking into account that each 4 errors discounts a positive, or his proportional part	90	B2 C1 B3 C3 B7 C4 B8 C7 B20 C8 C11

### Other comments on the Evaluation

In successive announcements the criteria of evaluation will be identical to the presented previously.

It is necessary to obtain at least 60% of answers very answered in the examination type test, taking into account that each 4 badly answered questions subtract a positive, or his proportional part.

### Sources of information

Kapandji, I.A. (2006). *Cuadernos de fisiología articular*. Tomos, I, II y III. Madrid: Médica-Panamericana.

Izquierdo, M. (2008). *Biomecánica y bases neuromusculares de la actividad física y el deporte*. Madrid: Médica-

Panamericana.

Nacleiro, F. (2011). Entrenamiento deportivo. Fundamentos y aplicaciones. Barcelona: Editorial médica-panamericana.

Nitsch, JR., Neumaier, a., Marées, H.& Mester, J. (2002). Entrenamiento de la técnica. Contribuciones para un enfoque interdisciplinario. Barcelona: Paidotribo.

VVAA. (2001). Kinesiología y anatomía aplicada a la actividad física. Barcelona: Paidotribo

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

Biomechanics of sports techniques/P02G050V01903

Planning and methodology in sports training I/P02G050V01502

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

Anatomy: Human anatomy for movement/P02G050V01101

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