# Universida<sub>de</sub>Vigo

Subject Guide 2014 / 2015

IDENTIFYIN					
	uman anatomy & kinesiology				
Subject	Anatomy: Human				
	anatomy &				
	kinesiology				
Code	P02G050V01201				
Study	(*)Grao en				
programme	Ciencias da				
	Actividade Física e				
	do Deporte				
Descriptors	ECTS Credits	,	Choose	Year	Quadmester
	6		Basic education	1st	2nd
Teaching	Spanish				
language					
Department					
Coordinator	García García, Óscar				
	Diz Gómez, José Carlos				
Lecturers	Diz Gómez, José Carlos				
	García García, Óscar				
	García Remeseiro, Tania				
	Padín Iruegas, María Elena				
	Taboada Iglesias, Yaiza				
E-mail	oscargarcia@uvigo.es				
	jcdiz@uvigo.es				
Web					
General					
description					

## Competencies

Code

- A1 (\*)Capacidade para deseñar, desenvolver e avaliar os procesos de ensino-aprendizaxe relativos á actividade física e ao deporte con atención ás características individuais e contextuais das persoas
- A3 (\*)Capacidade para aplicar os principios fisiolóxicos, biomecánicos, comportamentais e sociais, na proposta de tarefas nos procesos de ensino-aprendizaxe a través da actividade física e o deporte
- A4 (\*)Capacidade para identificar os riscos que se derivan para a saúde dos escolares debido á práctica de actividades
- A7 (\*)Capacidade para planificar, desenvolver e controlar o proceso de adestramento nos seus distintos niveis
- A8 (\*)Capacidade para aplicar os principios fisiolóxicos, biomecánicos, comportamentais e sociais, durante o proceso do adestramento deportivo
- A11 (\*)Capacidade para planificar, desenvolver e controlar a realización de programas de adestramento deportivo
- B2 (\*)Coñecemento e comprensión da literatura científica do ámbito da actividade física e o deporte
- (\*)Coñecemento e compresión dos factores fisiolóxicos e biomecánicos que condicionan a práctica da actividade física e o deporte

Learning aims		
Expected results from this subject	Trai	ning and Learning Results
Know the characteristics of the physical exercise systematised, criteria for his classification,	A1	B2
specific terminology and graphic representation of the same.	А3	
	A8	
Know the application of the exercise with the purpose of development of the qualities *psicofís	icas. A3	В3
	A4	
	Α7	
	A8	
	A11	

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

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	0.5	20	20.5

simulated.
\*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	Troubleshooting and / or The theoretical concepts will be accompanied in the theoretical classes with exercises and			
exercises	resolution of problems.			
Presentations /	They will present studies of cases so that student can have references			
exhibitions				
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
Laboratory practises	It is compulsory to assist at least to 80% of the practices to be able to obtain a positive evaluation	0
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
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

#### 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

# Recommendations Subjects that continue the syllabus Biomechanics of sports techniques/P02G050V01903 Methodology & planning of sports training 1/P02G050V01502

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

Anatomy: Human anatomy for movement/P02G050V01101