# Universida<sub>de</sub>Vigo

Subject Guide 2021 / 2022

				Subject Suide 2021 / 2022
G DATA				
Sports Performance				
Analysis of Sports				
Performance				
P02M156V01204				
(*)Máster				
Universitario en				
Investigación en				
Deporte e Saúde				
ECTS Credits		Choose	Year	Quadmester
20		Optional	1st	2nd
Spanish	'	,		
Galician				
García García, Óscar				
García García, Óscar				_
Rey Eiras, Ezequiel				
oscargarcia@uvigo.es				
	Analysis of Sports Performance P02M156V01204 (*)Máster Universitario en Investigación en Actividade Física, Deporte e Saúde ECTS Credits 20 Spanish Galician  García García, Óscar Rey Eiras, Ezequiel	Sports Performance Analysis of Sports Performance P02M156V01204 (*)Máster Universitario en Investigación en Actividade Física, Deporte e Saúde ECTS Credits 20 Spanish Galician  García García, Óscar Rey Eiras, Ezequiel	Sports Performance Analysis of Sports Performance P02M156V01204 (*)Máster Universitario en Investigación en Actividade Física, Deporte e Saúde ECTS Credits Choose 20 Optional Spanish Galician  García García, Óscar Rey Eiras, Ezequiel	Analysis of Sports Performance P02M156V01204 (*)Máster Universitario en Investigación en Actividade Física, Deporte e Saúde ECTS Credits Choose Year 20 Optional 1st Spanish Galician  García García, Óscar Rey Eiras, Ezequiel

#### Skills

## Code

- A2 The students known to apply the acquire knowledge and be able to solve problem in new environment or less known in wider contexts (or multidisciplinary) related with their study area.
- A5 The students own the ability of learn to continuos studying, in wide range, on a self-directed and autonomous way.
- B2 Be able to devise, design, put in to practice and adopt a research process rigorously academics in the physical activity, health and sports study ambit.
- B4 Critically analyze, evaluate and synthesize new and complex ideas in the physical activity, health and sports study ambit.
- C2 Develop scientific thoughts capacity to research in the physical activity, health and sports study ambit.
- C4 Show link attitudes with excellence habits, ethical commitment and quality in the research exercise physical activity, health and sports study ambit
- C5 Known and dominant the information search procedures and tools, both en primary and secondary sources in physical activity, health and sports.
- C6 Be able to analyze organized, select, classify and compile information about physical activity, health and sports study ambit.
- C7 Assess, manage and combine different techniques of physical activity, health and sports sciences research.
- C9 Be able to design and implement a research work in the physical activity, health and sports study ambit.
- C10 Manage software packages for the introduction and data analyze collected in the physical activity, health and sports study ambit.
- C13 Execute the most used statistical analyzed technique of the physical activity, health and sports research.
- C16 Be able to incorporated new technologies and integrate knowledge from other professional and scientific ambits.
- C21 Develop on a efficient manner own task s of the design, implementation, analyzed and publish work related wit the sports performance ambit.
- D1 Critically assess the knowledge, the technology and the available information to solve problems.
- D2 Effectively communicate in academic and informative ambits ideas and concepts linked with the physical activity, health and sports studies.
- D3 Be able to promote in academic and professional contexts activities to improve the technological advance, social and cultural, in physical activity, health and sports sciences field.
- D4 Use basic tools of information and communication technologies (ICTs) needed for their profession exercise and for the lifelong learning.

# Learning outcomes

Expected results from this subject	Training and
	Learning Results
The student will be able to realise an analysis of the sportive performance in a determinate sport, using	A2
like variables of study those that have showed to be determinated factors of the performance in this sport	. A5
	B2
	C2
	C4
	C5
	C6
	C7
	C9
	C16
	C21
	D1
	D3
	D4
The student will be able to interpret the results, giving felt to the most notable findings of his research,	B2
work and analysis of the data	B4
	C2
	C10
	C13
	D1
	D2
	D3
	D4

Contents			
Topic			
The scientific method in the analysis in the sports Identification of factors of the performance Hierarchy of the factors of the performance			
Designs of investigation for the analysis of the sports	Designs of investigation for the analysis of the sports of situation		
	Designs of investigation for the analysis of the sports bioenergetics		
Implementation of a design for the analysis of one or several sports	Implement a design of investigation to analyse a concrete sport		
Collected and processing of corresponding data to a design for the analysis of one or several sports	Collected and processing of corresponding data to a design for the analysis of the sport chosen		
Oral communication and written of a design for the analysis of one or several sports	Oral communication and written of the design for the analysis of the sport chosen		

	Class hours	Hours outside the	Total hours
	Class floars	classroom	rotal floars
Autonomous problem solving	0	100	100
Seminars	18	20	38
Laboratory practical	70	150	220
Flipped Learning	6	40	46
Lecturing	6	25	31
Problem and/or exercise solving	0.5	32	32.5
Essay	0.5	32	32.5

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

Methodologies	
	Description
Autonomous problem solving	The student will resolve the tasks proposed by the educational
Seminars	Discussion in small groups on the contents of the matter
Laboratory practical	They will propose practices of laboratory
Flipped Learning	The student will receive through the platform of faitic documentation so that it can work on her and later can pose to the professor doubt or problems of learning related with these contents
Lecturing	Theoretical classes-practical given by the educational

Personalized assi	istance
Methodologies	Description

Lecturing	The student will receive personalized attention at the time designated for it in each academic year. Agreed tutorials will also be established to monitor and control their activity of the theoretical contents within the subject. The tutorials or meetings will be held either in person or through virtual modality, either through the virtual offices of the teachers (1006, prof. Dr. Oscar García García), or by email or through the forums of the tele-teaching platform Moovi.
Laboratory practica	The student will receive personalized attention at the time designated for it in each academic year. Agreed tutorials will also be established to monitor and control their activity of the theoretical contents within the subject. The tutorials or meetings will be held either in person or through virtual modality, either through the virtual offices of the teachers (1006, prof. Dr. Oscar García García), or by email or through the forums of the tele-teaching platform Moovi.

Assessme	Assessment					
	Description	Qualificatio			ning a ng Res	
Problem and/or exercise solving	The proof will consist in answering to a battery of ten questions of short answer	25	A5	В4	C2 C4 C6 C7	D1
Essay	The work will consist in the design of a project of investigation related with the analysis of the performance in a determined sport. The student realized a theoretical positioning using the existent bibliography and from ahi developed the aims, hypothesis, and method of a possible design of investigation.	75	A2	B2 B4	C2 C4 C5 C6 C7 C9 C10 C13 C16 C21	D1 D2 D3 D4

#### Other comments on the Evaluation

The student will have to surpass all the proofs of evaluation to be able to surpass the subject. In case of not having surpassed the \*asignatura in the first announcement, the no purchased competitions will be evaluated in the announcement of July. The evaluation in successive announcements will realise of the same forms that the posed initially with the two proofs. The official dates of the examinations can consult in the page web of the faculty of Sciences of the Education and of the Sport http://fcced.uvigo.es

## Sources of information

## **Basic Bibliography**

Hohmann, A., Lames, M., y Letzeier, M., Introducción a la ciencia del entrenamiento., 1, Paidotribo, 2005

Tomas, J.R. y Nelson , J.K., **Métodos de investigación en actividad física.**, 1, Paidotribo, 2006

McGarry, T.; O'Donogue, P. y Sampaio, J., **Handbook of Sports performance analysis.**, 1, Routledge, 2013

# **Complementary Bibliography**

Nacleiro, F., Entrenamiento Deportivo: fundamentos y aplicaciones en diferentes deportes., 1, Medica panamericana, 2011

Neumaier, A. de Marees, H., Seiler, R., **Entrenamiento de la técnica. Contribuciones para un enfoque interdisciplinario.**, 1, Paidotribo, 2002

Magnusson, M.S., **Hidden real-time pattern in intra- and inter-individual behavior.**, Europan Journal of Psychological Assessment, 12(2, 1996

Beck, T. W., **The importance of a priori sample size estimation in strength and conditioning research**, Journal of Strength and Conditioning Research/Nati, 2013

Hopkins, W. G., Marshall, S. W., Batterham, A. M., & Hanin, J., **Progressive Statistics for Studies in Sports Medicine and Exercise Science**, Medicine & Science in Sports & Exercise, 4, 2009

Turner, A., Brazier, J., Bishop, C., Chavda, S., Cree, J., & Read, P., **Data Analysis for Strength and Conditioning Coaches: Using Excel to Analyze Reliability, Differences, and Relationships.**, Strength & Conditioning Journal, 37(1), 76

83., 2015

## Recommendations

# Subjects that it is recommended to have taken before

Exploratory Data Analysis and Inferential Analysis/P02M156V01108 Multivariate Analysis/P02M156V01109

Observation Designs Applied to Sports Research/P02M156V01105

Research Methods in Physical Activity and Sports Sciences/P02M156V01101

Scientific Communication and Documentation Sources in Physical Activity and Sports Sciences/P02M156V01102 Qualitative Methods in Physical Activity and Sports Sciences/P02M156V01106 Experimental and Quasi-experimental Methods in Physical Activity and Sports Sciences/P02M156V01103 Selective Correlational Methodology/P02M156V01104 Systematic Review and Meta-analysis/P02M156V01107

# **Contingency plan**

## **Description**

As a consequence of COVID-19 and in accordance with the extraordinary and urgent measures in the event of a health crisis, approved by the Governing Council on June 12, 2020 and the Resolution Rectoral of June 17, 2020 for its implementation, an instruction was prepared from the VOAP for the development of the teaching guides.

Based on this, the teaching of this subject for the 2021/2022 academic year in the event of a re-emergence of COVID-19 will be through a blended modality, in which neither the teacher nor the students attend the classroom physically, except in practical sessions . The theoretical classes will be carried out by remote campus and through the moodle platform. If necessary, this modality would be activated by RR.

The contents of the subject are maintained, both theoretical and practical

The teaching methodology in this case will be based fundamentally on reverse learning "Flipped Learning" in substitution of the other methodologies, where the student will work autonomously on the documents provided by the teacher through the Faitic (Moovi) tele-teaching platform and on the virtual face-to-face classes will be raised and the problems, doubts and shortcomings detected by the student and the teacher will be resolved.

The evaluation system will be the same.