Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 282026 **Name:** Research Methods and Techniques Applied to Behavioural Sciences.

Physical Activity and Sport

Credits: 6,00 **ECTS Year:** 4 **Semester:** 1

Module: 11) Optional module

Subject Matter: Research Methods in Physical Activity **Type:** Elective

Field of knowledge: Basic Sciences

Department: Basic Sciences and Cross-disciplinary Subjects

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

Module organization

11) Optional module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Athletics	6,00	Athletics	6,00	This elective is not offered in the academic year 24/25
Football	6,00	Football/Soccer	6,00	4/1
Swimming	6,00	Swimming	6,00	This elective is not offered in the academic year 24/25
Tennis	6,00	Tennis	6,00	This elective is not offered in the academic year 24/25
Basketball	6,00	Basketball	6,00	This elective is not offered in the academic year 24/25
New Tendencies of Practices in Sports Centers	6,00	New Trends of Practice in Sports Centres	6,00	This elective is not offered in the academic year 24/25
Paddel Tennis	6,00	Paddle	6,00	4/1
Direction and management of fitness and sports facilities	6,00	Direction and Management of Gymnasiums and Sports Centres	6,00	This elective is not offered in the academic year 24/25

Research Methods in Physical Activity	6,00	Research Methods and Techniques Applied to Behavioural Sciences. Physical Activity and Sport	6,00	4/1
Water recreation activities	6,00	Recreational Water Activities	6,00	This elective is not offered in the academic year 24/25
Sport in the Natural Environment: Specific Techniques	6,00	Sports in the Natural Environment: Specific Techniques	6,00	This elective is not offered in the academic year 24/25

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1	The student will learn research methodology of the investigation: stages, themes choice, hypothesis, population selection.
R2	The student will learn to gain knowledge and have a good comprehension of the scientific methods applied to the Sport Science.
R3	Mastering APA style and use of references managers software.
R4	The student will be able to perform a scientific report: Process, functions and types.
R5	The student will learn to apply descriptive/inferential techniques for one or several variables.
R6	Be able to understand, quantify and express the linear relationship between two numerical variables.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

GENERAL		Weighting			
		1	2	3	4
CG1	Understanding scientific literature in English and other important languages widely used in the scientific field achieving a good management of information		x		
CG2	Ability to apply information technology and communication (ICT)			x	
CG3	Develop skills to solve problems through decision-making			x	
CG4	Transmit any information regarding the contents of body expression both in writing and orally				x
CG7	Be capable of critical reasoning using the knowledge gained				x
CG13	Being able to apply theoretical knowledge in practice				x
CG14	Use Internet well as communication and as a source of information			x	
CG15	Conveying the acquired knowledge both to specialists in the subject and to people who are not experts on it			x	
CG19	Developing habits aiming at obtaining excellence and quality at work			x	

SPECIFIC		Weighting			
		1	2	3	4
CE1	Knowing and understanding the contents within the scope of Physical Activity and Sports Science			x	

CE2	Acquiring the basic scientific knowledge to different areas of Physical Activity and Sports and understanding literature in the field of physical Activity sports in English and in the other important languages widely used in the scientific field achieving a good management of information		x	
CE19	Learn to apply the techniques of information and communication within the body expression			x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6	50,00%	Written/oral and/or practical tests.
R1, R2, R3, R4, R5, R6	5,00%	Participation and self-assessment.
R1, R2, R3, R4, R5, R6	25,00%	Completion of a project.
R1, R2, R3, R4, R5	20,00%	Oral exhibition of individual and / or group works.

Observations

To pass the subject in the FIRST ENROLMENT will be essential:
·It is compulsory to submit all proposed work and activities throughout the course and have a minimum grade of 5 points in them.
·It is required obtaining a passing grade (5 of 10) in the written exam.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1 Exhibition of contents by the teacher.

M2 Dynamics and group activities.

M3 Resolution of problems and cases.

M5 Discussion in small groups.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
PRACTICAL /SEMINAR CLASS: Dynamics and group activities. Resolution of problems and cases. Laboratory practices. Data search in a computer room, library... Meaningful construction of knowledge through the interaction and activity of the student M2, M3, M5	R1, R2, R3, R4, R5, R6	34,00	1,36
TUTORY: Learning supervision, evolution. Discussion in small groups. Resolution of problems and cases. Presentation of results before the teacher. Presentation of schemes and indexes of the proposed works. M5	R1, R2, R3, R4, R5, R6	2,00	0,08
EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final project. M2, M3	R1, R2, R3, R4, R5, R6	4,00	0,16
THEORETICAL CLASS: Presentation of content by the teacher. Competency analysis. Demonstration of skills, abilities and knowledge in the classroom. M1, M2, M5	R1, R2, R3	20,00	0,80
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Problem solving. Preparation of exercises, works, memories, to exhibit or deliver in classes and / or in tutoring. M2, M3	R1, R2, R3, R4, R5	35,00	1,40
AUTONOMOUS WORK: Study, Individual preparation of exercises, works, memories, to exhibit or deliver in classes and / or in tutoring. Platform activities or other virtual spaces. M3	R1, R2, R3, R4, R5	55,00	2,20
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Unit I: Fundamentals of Research Methodology in Physical Activity and Sports	Lesson 1: Introduction to Research in Physical Activity.Lesson 2: The problem of the Research. The scientific method. Phases of a Research.Lesson 3: The research report. Types and structure.Lesson 4: Literature review. Databases. Bibliographic styles and citations. Bibliographic Software: Refworks, Zotero.Lesson 5: Definition of research designs.
Unit II: Practical cases. Analysis of the data obtained from investigations of Physical Activity and Sport with statistical software: step by step.	Lesson 6. Review basic concepts of descriptive statistics.Lesson 7. Statistical inference: Hypothesis testing.Lesson 8. Relationship between variables

Temporary organization of learning:

Block of content	Number of sessions	Hours
Unit I: Fundamentals of Research Methodology in Physical Activity and Sports	14,00	28,00
Unit II: Practical cases. Analysis of the data obtained from investigations of Physical Activity and Sport with statistical software: step by step.	16,00	32,00

References

BASIC BIBLIOGRAPHY:

Day, Robert A. (2005). *Cómo escribir y publicar trabajos científicos* (3ª Ed.) Washington, D.C.: Organización Panamericana de la Salud.

Diez, D., Barr, C. y Çentikaya-Rundel, M. (2013). *Openintro Statistics* (2ª Ed). Recuperado de https://www.openintro.org/stat/textbook.php

Martín González, Germán (2008). *Prácticas de Estadística básica con SPSS*. Valencia: Universidad Católica de Valencia San Vicente Mártir.

Martín González, Germán (2009). *Introducción a la estadística*. Valencia: Universidad Católica de Valencia San Vicente Mártir.

Sampieri Hernández, R., Collado Fernández, C. y Lucio Baptista, P. (2008). *Metodología de la investigación* (4ª Ed.). México D.F., México: McGraw-Hill.

Thomas, J.R., Nelson, J.K. y Silverman, S.J. (2007). *Métodos de Investigación en actividad física.* Barcelona: Paidotribo.

COMPLEMENTARY BIBLIOGRAPHY:

Ballester, R., Huertas, F., Yuste, F. J., Llorens, F., & Sanabria, D. (2015). *The relationship between regular sports participation and vigilance in male and female adolescents.* PloS one, 10(4).

Benito Peinado, P. J., Díaz Molina, V., Calderón Montero, F. J., Peinado Lozano, A. B., Martín Caro, C., Álvarez Sánchez, M., & Pérez Tejero, J. (2007). *La revisión bibliográfica sistemática en fisiología del ejercicio: recomendaciones prácticas.* RICYDE. Revista Internacional de Ciencias del Deporte, 3(6).

Borreani, S., Calatayud, J., Martin, J., Colado, J. C., Tella, V., & Behm, D. (2014). *Exercise intensity progression for exercises performed on unstable and stable platforms based on ankle muscle activation.* Gait & posture, 39(1), 404-409.

Prellezo, J.M. & García, J.M. (2003). INVESTIGAR. *Metodología y técnicas del trabajo científico.* Madrid: CCS.