

## **COURSE DATA**

Data Subject		
Code	33216	
Name	Introduction to research in sciences of physical activity and sports	
Cycle	Grade	
ECTS Credits	6.0	
Academic year	2022 - 2023	

Study (s)		
Degree	Center	Acad. Period year
1312 - Degree in Physical Activity and Sport Sciences	Faculty of Physical Education and Sport Sciences	2 Other cases
1331 - Degree in Physical Activity and Sport Sciences (Ontinyent)	Faculty of Physical Education and Sport Sciences	2 Other cases
Subject-matter		
Degree	Subject-matter	Character
1312 - Degree in Physical Activity and Sport Sciences	12 - Introduction to research in physical activity and sport sciences	Obligatory
1331 - Degree in Physical Activity and Sport Sciences (Ontinyent)	12 - Introducción a la Investigación en Ciencias de la Actividad Física y del Deporte	Obligatory

Coordination					
Name	Department				
BO BONET, ROSA MARIA	270 - Research Methodology, Educational Diagnosis and Assessment				
SAEZ GARCIA, ABELARDO	270 - Research Methodology, Educational Diagnosis and Assessment				

## SUMMARY

Through this course aims to provide students with basic information to get to understand the basics of the concepts, methods and techniques to perform basic research in the field of physical education and sport..



It starts from the notion that any professional in this field, to achieve minimum levels of quality must involve an effort to explore and innovate, ie to investigate. In this sense, it is to review the principles and procedures that can be offered for that purpose. A central goal of which occupies a substantial part of the subject, aims to offer a comprehensive overview and critique of different action alternatives in research and quality criteria that must be addressed. Another essential core is a first approach to procedures for information management in support of the vast majority of the research process.

As secondary objectives the student is to approach the methodology and technology and integrate them into your luggage for everyday action. It also seeks the domain of a formalized language that allows them easier access to information and a means of communication with other professionals.

## **PREVIOUS KNOWLEDGE**

#### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

#### Other requirements

None

### **OUTCOMES**

### 1312 - Degree in Physical Activity and Sport Sciences

- Gain basic scientific training applied to physical activity and sport in their diverse forms.
- Know and understand the epistemological, historical and educational foundations of physical activity and sport.
- Know and understand the behavioural and social factors that determine the practice of physical activity and sport.
- Know and understand the effects of the practice of physical exercise on the psychological and social dimensions of the human being.
- Apply the principles of fundamental rights, gender equality, equal opportunities, universal accessibility for people with disabilities, solidarity, environmental protection, the culture of peace and democratic values.
- Promote and evaluate the acquisition of enduring and autonomous habits of practising physical activity and sport.
- Apply physiological, biomechanical, behavioural and social principles to the different fields of physical activity and sport.
- Select and know how to use sports material and equipment, suitable for each type of activity and population.



- Understand the scientific literature in the field of physical activity and sport in English and in other languages with significant presence in the scientific field.
- Develop resources to adapt to new situations and to solve problems, and for independent learning and creativity.
- Develop habits of professional excellence and quality.
- Know and understand what scientific research is and its process.
- Know the mechanisms for designing a research project.
- Know and understand the value of information as a tool for the practical, professional and scientific development of graduates in physical activity and sport sciences.
- Acquire skills for the correct use of the most frequently used information and communication tools.
- Know and distinguish the different types of scientific texts.
- Know how to use databases for bibliographic search.
- Be able to follow the rules referring to the structure of the research work and to express ideas correctly in specific technical documents.

### **LEARNING OUTCOMES**

- He can do literature searches in various search engines and databases.
- Knows how to properly cite every paper that found in a search.
- He can identify the variables involved in research and allocate their role.
- Given a number of documents belonging to different types of research can tell what kind it is.
- Knows how to recognize the validity problems that present the research study.
- Knows how to differentiate what kind of design has been used in each research subject matter.
- Knows how to properly raise a roadmap for research.
- Meet all descriptive indexes (tab, position indicators, indices of central tendency, variability indexes and indexes of the distribution of the form) and its graphical representation of a sample and can interpret.

Can use appropriate evidence in each case to test the relationship between two samples (both parametric and non parametric).

### **DESCRIPTION OF CONTENTS**

#### 1. RESEARCH AND KNOWLEDGE

Epistemological bases of scientific research. The scientific method. Overall research process. Types of studies.



# 2. INFORMATION NEEDS AND RESOURCES PROFESSIONALS DOCUMENTARY OF PHYSICAL ACTIVITY AND SPORT (I)

The scientific and technical and scientific documentation. Primary and secondary documents. Digital resources. Internet. Recovery Systems information.

# 3. INFORMATION NEEDS AND RESOURCES PROFESSIONALS DOCUMENTARY OF PHYSICAL ACTIVITY AND SPORT (II)

CCAFD scientific communication. Books, journals and other media. Types of scientific articles. Phases, structure and publish a scientific paper.

# 4. INFORMATION NEEDS AND RESOURCES PROFESSIONALS DOCUMENTARY OF PHYSICAL ACTIVITY AND SPORT (III)

The library and information resources of the University of Valencia. Funds: sections. Documentary searches. Request access to documents.

#### 5. EVALUATION OF SOURCES OF INFORMATION

Preliminary assessment. Content Analysis.

#### 6. ACADEMIC PAPERS

How to cite the selected resources. Models citation of the main fields of CCAFD.

#### 7. QUALITY CRITERIA FOR QUANTITATIVE RESEARCH

Characteristics and evolution of the criteria. Criteria: Credibility and generalization.

#### 8. QUALITY CRITERIA FOR QUALITATIVE RESEARCH

Characteristics and evolution of the criteria. Criteria: credibility, transferability, and confirmability dependence.

#### 9. QUANTITATIVE EXPERIMENTAL DESIGN

Characteristics of experimental designs. Classification of experimental designs and products. Variance, variance and types of experimental control. Types of experimental designs.



#### 10. NO EXPERIMENTAL QUANTITATIVE DESIGN

Features. Development studies, correlational studies, survey studies and observational studies.

#### 11. QUALITATIVE DESIGN: UNDERSTANDING AND CHANGE

Features. Phenomenology, Ethnography, Case Studies and Theory. Design of action research, participatory research and collaborative research.

#### 12. MIXED METHODS DESIGN

Design concept of mixed methods. Features. Typology of mixed methods designs.

#### 13. INTRODUCTION TO DATA ANALYSIS

Data analysis in the General Research Process. Concept of Statistics. Univariate and bivariate descriptive statistics. Contrast independent and paired samples.

### **WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
Attendance at events and external activities	5,00	/ <sub>(1)</sub>   x / 0
Development of group work	15,00	0
Development of individual work	15,00	/\\
Study and independent work	10,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	5,00	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	15,00	0
ТОТ	AL 150,00	

### **TEACHING METHODOLOGY**

The lectures consist of explanations by the teacher lectures, and activities with students. The class lasts an hour and a half, and try to bring the contents as possible, their own experiences with the use of examples with which they are close and understandable. In the lectures will be corrected, work on case studies (research summaries) which will be completed as progress is made in this area will be dedicated weekly time to meet the exercises.



The practical classes are held in the computer room, this allows us to see how the support is real technology research. Importantly, and that students are aware of this support function. You need to know what we do to properly use tools that provide us with our work. It is also important to introduce different tools that serve for the same utility, to find those aspects that are common to all and those who differ, which is normally linked to the strengths and weaknesses of each.

## **EVALUATION**

The assessment will consist of the following parts:

	Character	% Of Final Score
Test	Mandatory	80%
Class work	Mandatory	20%
works	Volunteer	Improve note

The aggregate of the assessment must be at least 5 half-about 10 - to pass the course, taking into account both the examination and class assignments.

The examination of the subject consists of an objective test and a practical test. I need a minimum of 5 (out of 10) to pass the exam and be able to average with other sections of the assessment.

The work of the lectures will consist of group work (maximum six components per group) that will develop critical analysis from a research and development of a research project. Students who can not perform the work of the kind of theory are to be considered in this part, through a test that will take place on the official examination of the subject. It is necessary that the work has a minimal quality to pass the course, otherwise it will be necessary to repeat it.

The work of the kinds of practices (more than two components per group) consist of presenting the different activities that occur in practical classes and a final consisting of the data analysis. It is necessary that the final work practices and have a minimum quality to pass the course, otherwise it will be necessary to repeat it.



The notes of the work will be saved in the first round of June to the September exam, not for subsequent courses.

There is the possibility of volunteer work related to the subject. These works can be carried out individually or in groups. The evaluation of these works will be applicable only after obtaining the minimum level in the tests described above. In no case the application of a score for volunteer work will involve increasing the note more than one length (eg approved notable). If a student does not pass the subject in the first round (February), the note of this work would be saved for the next (June).

In the section of works will also be considered works which are carried out in class, correcting and delivered to the teacher. Like volunteer work, the valuation of such work shall be applicable only after obtaining the minimum level in the tests described above.

### **REFERENCES**

#### **Basic**

Aliaga, F. M. (2000). Bases epistemológicas y proceso de investigación psicoeducativa. Valencia:
CSV.

Almerich, G., Orellana, N., Suárez, J.M., Aliaga, F.M., Bo, R.M. (2010). Iniciación a la Investigación Educativa para el Profesorado de Secundaria. Valencia: Palmero Ediciones.

Bisquerra, R. (2004). (Coord.) Metodología de la Investigación Educativa. Madrid: La Muralla.

Cohen, L. y Manion, L. (1990). Métodos de Investigación Educativa. (3 ed.). Madrid: La Muralla.

Colás, P. y Buendía, L. (1994). Investigación educativa. (2ª ed.). Sevilla: Alfar.

Glass, G. V. y Stanley, J. (1986). Métodos estadísticos aplicados a las ciencias sociales. México D.F.: Prentice Hall.

Hernandez Pina, F. (2001). Bases Metodológicas de la investigación educativa. I Fundamentos. ( 2 ed. Vol. 1 ). Murcia: Diego Marín

Latorre, A., Del Rincón, D., y Arnal, J. (1996). Bases Metodológicas de la Investigación Educativa. Barcelona: Hurtado ediciones.

Lizasoain, L. y Joaristi, L. (2003). Gestión y análisis de datos con SPSS. Madrid: Thomson Paraninfo McMillan, J. H. y Schumacher, S. (2005). Investigación educativa. Madrid: Pearson Educación Rodríguez, G., Gil, J. y García, E. (1996). Metodología de la investigación Educativa. Málaga: Aljibe Sandín Esteban, M. P. (2003). Investigación Cualitativa en Educación. Fundamentos y tradiciones. Madrid: McGraw-Hill.

Tójar Hurtado, J. C. (2006). Investigación Cualitativa. Comprender y actuar. Madrid: La Muralla.

#### Additional

- Aliaga, F. M. (2000). Validez en la investigación causal. Tipologías y evolución. Bordón, 52(3), 301-321.

Bartolomé, M. (1992). Investigación cualitativa en educación: ¿comprender o transformar?. Revista de Investigación Educativa, 20, 7-36

Callan, S.J., Penwarden, A.P. y Wendell, C. (1999). The New Guide to Writing Research Papers (Monroe Community College: State University of New York).



Http://www.monroecc.edu/depts./library/append.htm. Consultado 20 de julio de 2011.

Creswell, J.W. (2003). Research design. Qualitative, Quantitative and Mixed methods Approaches. 2<sup>a</sup> Edición. Thousand daks, CA: Sage.

Johnson, R.B., Onwuegbuzie, A.J. y Turner, L.A. (2007) Toward a Definition of Mixed Methods Research. Journal of Mixed Methods Research, 1, 112-113

Perez Serrano (Coord.) (2000), Modelos de investigación cualitativa. Madrid: Narcea

Ruiz-Maya, L: Martin-Pliego, J.; López, J.; Montero, J.M. y Uriz, P. (1990) Metodología estadística para el análisis de datos cualitativos. Madrid: CIS.

Sandin, M. P. (2000). Criterios de validez en la investigación educativa: de la objetividad a la solidaridad. Revista de Investigación Educativa, 18 (1), 223-242.

Stake, R. E. (1998). Investigación con estudio de casos. Madrid: Morata

Suárez, J. M. y Jornet, J. M. (1990). Reflexiones en torno a la validación de pruebas psicométricas y edumétricas: un acercamiento ecléctico. Revista de Investigación Educativa, Vol. 8 nº 16, 517-526.

