

Teaching Guide 2018/2019

Teaching Guide 2018/2019

Conceptual Basis of Sports Science

Degree in the Science of Physical Activity and Sport
On-site Teaching Method



Contents

Conceptual Basis of Sports Science	3
Brief Description of the Subject	3
Prerequisites	3
Subject Aims	3
Skills and Learning Outcomes	4
Methodology	5
Syllabus	6
Connection to other Subjects on the Syllabus	8
Evaluation System	8
Bibliography and Reference Sources	10
Related Websites	11
Study suggestions	12
Teaching Material	12
Tutorials	12



Conceptual Basis of Sports Science

Module: Applied sciences and Motility

Subject: Applied sciences in Physical Activity and Sport

Type: **Basic Training**No. of credits: **6 ECTS**

Time period: First course - Four weeks

Subject Teacher: Dr. Luis Manuel Martínez Aranda

Email: Immartinez2@ucam.edu

Office hours for pupils: Tuesdays (9:30am to 11:30pm)

Coordinating Teacher of module, subject or course: Dr. Luis Manuel Martínez Aranda

Brief Description

This subject is designed for the student to learn and understand what scientific knowledge is, with the aim of studying Physical Activity and Sports Science. It also aims to provide students with basic scientific knowledge that can be applied to settings of physical activity and sports. Both goals are for basic disciplinary knowledge (expertise) stated in the Degree White Book. It is an introductory subject that will allow the student to understand the conceptual foundations of our field of study and learn to apply the research methodology. The course aims to introduce the student to the study of Human Movement, encouraging reflection of the epistemology of the Physical Activity and Sports Science, and providing the basics necessary to get started in research methodology.

Requisitos Previos

There are no prerequisites

Objetives

- 1. To differentiate between and assimilate the basic concepts of Physical Activity and Sports Sciences, reflecting on the lack of clear terminology present in this discipline, making critical judgments and adopting different stances about these problems.
- 2. To learn the characteristics of scientific knowledge and the role of Science in University, and to identify the areas of expertise and the aim of studying Physical Activity and Sports Science.
- 3. To recognize the disciplinary history of Physical Activity and Sports Science; to understand the consequences of this history in the current disciplinary field, in the labour market and in the Degree Study Plan structure; and to analyze future trends as a scientific discipline, as a profession and as a Degree.



- 4. To acquire basic strategies to carry out bibliographic research in a systematic and organized form, handling different sources of information and documentation.
- 5. To understand the ontological, epistemological and methodological differences of the main scientific paradigms; and to familiarize oneself with scientific methodology, differentiating types, characteristics and phases of research.
- 6. To analyse and write scientific texts in the field of Physical Activity and Sports Sciences.

Skills and Learning Outcomes

Transferable Skills

- (2) Able to organize and plan: the student will be able to manage and organize the information acquired during the learning process.
- (3) Prove oral and written communication in their native language: the student will be able to correctly express themselves in oral and written form in their native language.
- (CT6) Able to manage information: the student will be able to organize and know how to use the information deriving from the different contexts.
- (CT9) Team work: the student will be able to acquire and implement collaborative strategies and abilities that encourage cooperative work.
- (CT11) Interpersonal relationship skills: the student will be able to acquire and implement social and communication skills which encourage interaction.
- (CT13) Critical thinking: the student will be able to make judgments and take a critical stance when faced with a variety of situations in daily life.
- (CT15) Autonomous learning: the student will be able to proactively manage their learning process.

Specific Skills

(CES7) Be able to learn and apply the scientific method in the field of Physical Activity and Sports Science.

Learning Outcomes

- (RA) Understand and distinguish between the characteristics of scientific information and how to interpret this.
- (RA) Interpret and use specific scientific literature of physical activity and sports for the performance of one's training and professional activities.
- (RA) Design and use research patterns in physical activity and sports for the performance of one's training and professional activities.
- (RA) Manage and organize information acquired during the learning process.
- (RA) Correctly express oneself in oral and written form in one's native language.
- (RA) Organize and know how to use the information deriving from different contexts.
- (RA) Acquire and implement collaborative strategies and abilities that promote cooperative learning.



- (RA) Acquire and implement social and communicative abilities promoting interaction.
- (RA) Make judgments and take a critical stance when faced with a variety of situations in daily life.
- (RA) Proactively manage one's learning process.
- (RA) Use proper spelling and grammar in oral and written language.
- (RA) Learn and properly use the resources provided by new Computer and Communication Technologies.
- (RA) Collaborate with other professionals, recognizing the different benefits that other areas of expertise contribute to the professional exercise.
- (RA) Undertake actions promoting interest and motivation in the research.

Methodology

Methodology	Hours	On-site Working Hours	Off-site Working Hours
Theoretical-practical presentation	33	60 hours (40%)	
Tutorials, monitoring the student's work	3		
Seminars, workshops presentations and assignment discussions	9		
Teaching practices in computer classrooms	12		
Assessment	3		
Autonomous work of the student	45	45	90 hours (60%)
Applied work	33.75		
	112.5	-	
Methodology	Hours	On-site Working Hours	Off-site Working Hours



Syllabus

Programme of Theoretical Teaching

Teaching Unit I. The Epistemology of Physical Activity and Sports Science:

- Topic 1. Terminological Concept:
 - 1.1. Vagueness of sport terminology.
 - 1.2. Corporeality and motility.
 - 1.3. Motility expressions.
 - 1.4. Physical activity vs physical exercise.
 - 1.5. Sports and play.
 - 1.6. Physical education
- Topic 2. Areas of Expertise and Identification of Study Aim:
 - 2.1. Science or Sciences? Of what?
 - 2.2. Identification of study aim.
 - 2.3. Variety of disciplines.
 - 2.4. Ares of expertise and structure of Physical Activity and Sports Science.
- Topic 3. Origin and Evolution of Physical Activity and Sports Science:
 - 3.1. Disciplinary background
 - 3.2. Evolution of the subject: from gymnastics to motility.
 - 3.3. Consequences in the disciplinary field.
 - 3.4. Current professional details.
 - 3.5. Employment and professional regulations.
 - 3.6. Degree: The white book of the Degree in Physical Activity and Sports Science.
 - 3.7. The adaptation of Higher Education to the European Space (EEES).

Teaching Unit II. Science and the University:

Topic 4. Scientific Knowledge:

- 4.1. Characteristics of scientific knowledge.
- 4.2. Classification of the sciences.
- 4.3. Scientific paradigms.
- 4.4. The scientific method.
- Topic 5. Introduction to Scientific Methodology: Types, Characteristics and Stages:
 - 5.1. Types of research
 - 5.2. Characteristics and stages of research.
 - 5.3. Parts of the scientific text.

Teaching Unit III. Strategies for Autonomous Learning:

- Topic 6. Management of sources of information and documentation:
 - 6.1. Basic ideas in information research.
 - 6.2. New technology in the search for information.
 - 6.3. Steps to carry out information research.
 - 6.4. Criteria for selecting documents.



- 6.5. Document sources in Physical Activity and Sports Science.
- 6.6. Citation of sources: APA regulations (American Psychological Association).

Practical Teaching Programme

Practical:

Practical 1: Search for information in international databases.

Practical 2: Search for information in other databases.

Practical 3: Search for information and quality evidence in specialized scientific magazines.

Practical 4: Other resources for searching for information: catalogues, editorials and search engines.

Practical 5: Archiving and organization of information.

Practical 6: Recovery and referencing of information: bibliography managers.

Workshops:

Workshop 1: On reading, analysis and writing of scientific texts. Selection of texts I.

Workshop 2. On reading, analysis and writing of scientific texts. Selection of texts II.

Seminars:

Seminar 1: Presentation and debate of scientific texts I.

Seminar 2: Presentation and debate of scientific texts II.

Seminar 3: Presentation and debate of scientific texts III.

Seminar 4: Presentation and debate of scientific texts IV.

(The number of seminars is estimated and may change depending on the number of students and the organization of the working groups)

Tutorials:

Tutorial 1: Bibliographic citation according to APA regulations. Practical explanation and activities.

Tutorial 2: Bibliographic referencing according to APA regulations. Practical explanation and activities.

Tutorial 3: Citation and referencing according to APA regulations. Use of documented sources.

Connection to other Subjects in the Syllabus

As an introductory subject in the degree, the subject of Conceptual Basis of Sports Science will allow the student to learn the fundamentals of motility, as well as to systematically understand the complexity of the fields of study, Physical Activity and Sports Science. For the students to understand the various disciplines of the field and the consequential variety of the Degree, the integration of the education acquired will be promoted. On the one hand, they will understand the importance of Biological Sciences (Human Anatomy; Sports Physiology; and Sports Biomechanics) and Social Sciences (Psychology and Behavioral



Analysis in Sport; Learning, Development and Motor Control; Educational fundamentals of Sport; Historical Fundamentals of Sport; and Socio-Cultural Fundamentals of Sport) as part of the basic training. On the other hand, they will observe the importance of studying the "different cultural forms" or corporal techniques: Dance and Body Language; Motor Skills; Physical Activity in Nature; Individual and Team Sports; Combat and Instrument Sports; Racket sports; Gymnastics and Musical support; Water sports and Sliding. The students will be aware of the area of expertise that make up the subject and the professional profiles of the Degree. This will allow them to make sense of the distribution of applied knowledge they will gain throughout the second part of the Degree in different modules: Teaching Physical Activity and Sports; Sports Training; Sports and Quality of Life; Management and Recreational Sports.

Evaluation System

February/June Semester:

- Theoretical Tests: 50% of the total grade. Requirements: Students who exceed 50% of class attendance. In this case, the theoretical part of the subject will be assessed in two partial exams that must be pass independently. The value of each of these tests will be: first exam 25% and second exam 25%. It will be necessary to obtain a grade of 5 points in each one of the tests that are proposed to apply the average.
- Practical Tests: 50% of the total grade. Requirements: Attendance to 80% of all sessions in each separate field. In this case, the practical part of the subject will be assessed with oral presentation and work in groups (seminars 1 & 2 text analysis) (25%) and practical activities (6), workshops (4) and tutorships (2) (25%).

It will be necessary to score 5 points in each test given to use the average.

Requirements:

The student will pass the subject when the weighted average is equal to or greater than 5 points in all the parts that make up the evaluation system that imply 20% of the final grade. If the student has less than a 5 in any of the parts whose weighting is equal to or greater than 20%, the subject will be failed and must recover that part (s) in the next call within the same academic year. Past part (s) in official calls (February / June) will be saved for the successive convocations held in the same academic year.

In case the subject is not passed in the September Call, the approved parts will not be taken into account for successive academic courses.

The grading system (RD 1.125 / 2003, of September 5) will be as follows:

0-4,9 Fail (F or "suspenso")

5,0-6,9 Pass (C or "aprobado")



7.0-8.9 Outstanding (B or "notable")

9,0-10 Excellent (A or "sobresaliente")

The mention "with honors" may be granted to students who have obtained a mark equal to or greater than 9.0. Their number may not exceed 5% of the Students enrolled in a subject in the corresponding academic year, except that the number of students enrolled is less than 20, in which case it can be grant a single distinction.

Bibliography and Reference Sources

Basic Bibliography

APA (2006). Manual de estilo de publicaciones de la American PsychologicalAssociation (3°
ed.). México: Manual Moderno. (Teaching Unit III).
Coakley, J. (1990). Sport in Society: Issues and controversies. St. Louis: Times.
Estévez, M. (2004). Los paradigmas de investigación en el campo de la cultura física y el
deporte. En M. Estévez, M. Arroyo, & C. González (eds.), La investigación científica en la
Actividad Física: su Metodología. Ciudad de la Habana: Editorial Deportes. (Teaching Unit II).
Gutiérrez, M., & Oña, A. (2005). Metodología en las Ciencias del Deporte. Madrid: Síntesis.
(Teaching Units I and II).
McFee, G. (2010). Ethics, Knowledge and Truth in Sports Research: An Epistemology of Sport.
London: Routledge.
McNamee, M. (1998). Philosophy and Physical Education: Analysis, Epistemology and
Axiology. European Physical Education Review, 4(1).
Rey, A. & Canales, I. (2007). Discurso epistémico para una Ciencia de la Motricidad. Cinta de
Moebio, 28, 104-123. (Teaching Unit I).
Rodríguez, J. (1995). Deporte y Ciencia. Teoría de la actividad física. Barcelona: In-de.
(Teaching Unit I and II).
Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2015). Research Methods in Physical Activity.
United States: Human Kinectics.
Wuest, D.A. & Bucher, C.A. (2006). Foundations of physical education, exercise science and
sport (15 adition) Now York: McGraw-Hill Higher aducation

Additional Bibliography

- Abadal, E. & Lluís C. (2005). Bases de datos documentales: características, función y método.
 Madrid: Síntesis.
- Agencia Nacional de Evaluación de la Calidad y Acreditación [ANECA] (2004). Libro blanco Título de Grado en Ciencias de la Actividad Física y del Deporte.
- Anteproyecto de Ley sobre ordenación del ejercicio de determinadas profesiones del deporte.
 Madrid, a 3 de julio de 2007.



- Arboleda, R. (2008). Las expresiones motrices. Una representación. Hacia la configuración del campo académico. Revista digital efdeportes, 119. Recuperado de http://www.efdeportes.com/efd119/las-expresiones-motrices.html
- Benjumea, M.M. (abril, 2004). La motricidad, corporeidad y pedagogía del movimiento en educación física. Un asunto que invita a la transdisciplinariedad. Trabajo presentado en el III Congreso Científico Latino Americano – I Simposio Latino Americano de Motricidad Humana, Piracicaba, Brasil.
- Blanco, E. (2003). El deporte como demanda social. En M. Hernández, A. Lorenzo & F. Saucedo (eds.), El deporte para todos en España: presente y futuro. VII Congreso y Asamblea de Deporte para Todos (pp. 11-26). Madrid, INEF-Madrid.
- Bunge, M. (1980). Epistemología. Barcelona: Ariel.
- Bunge, M. (1985). La investigación científica. Barcelona: Ariel.
- Cagigal, J.M. (1996). José María Cagigal. Obras selectas. Cádiz: Comité Olímpico Español.
- Corbetta, P. (2003). Metodología y técnicas de investigación social. Madrid: McGraw-Hill.
- Escudero, T. (2011). *La construcción de la investigación evaluativa*. Zaragoza: Prensas Universitarias de Zaragoza. Recuperado de http://www.unizar.es /sg/doc/alocución.pdf
- Gambau i Pinasa (2010). Deporte y empleo en España: dificultades de estudio. En A. Díaz,
 A. Martínez-Moreno y V. Morales (Eds.), Mercado laboral y competencias asociadas. IX
 Congreso Internacional Educación Física e Interculturalidad (pp.23-44). Murcia: Consejería de Educación, Formación y Empleo.
- García Ferrando, M., &Llopis, R. (2011). Ideal democrático y bienestar personal. Encuesta sobre los hábitos deportivos en España 2010. Madrid: Consejo Superior de Deporte y Centro de Investigaciones Sociológicas.
- Heinemann, K. (2003). Introducción a la metodología de la investigación empírica en las Ciencias del Deporte. Barcelona: Paidotribo.
- Instituto Nacional de Cualificaciones & Consejo Superior de Deportes (2008). La familia Profesional de Actividades Físicas y Deportivas. Madrid: Ministerio de Educación, Política Social y Deporte.
- Kunh, T.S. (1975). La Estructura de las Revoluciones Científicas. Madrid: F.C.E.
- Ley 3/2008, de 16 de abril, del ejercicio de las profesiones en el deporte. Boletín Oficial del Parlamento de Cataluña, 21 de abril de 2008, núm. 248.
- Ministerio de Educación, Cultura y Deporte (2003). La integración del sistema universitario español en el Espacio Europeo de Enseñanza Superior. Documento Marco. Madrid: España.
- Pastor Pradillo, J.L. (2004). ¿Quo vadis gimnástica? Aproximación histórica a la evolución de una profesión. Revista Española de Educación Física y Deportes, 1, 15-38.
- Quivy, R. &Campenhoudt, L.V. (2000). Manual de investigación en Ciencias Sociales. México: Limusa.
- Sergio, M. (2003). Um corte epistemológico. Da educaçao física á motricidade humana.
 Lisboa: Instituto Piaget.
- Trigo, E. (Ed.). (2002). Fundamentos de la Motricidad. Madrid: Gymnos.
- Vázquez, B. (2001). Los fundamentos de la educación física. En B. Vázquez (ed.), *Bases educativas de la actividad física y el deporte* (pp.69-84). Madrid: Síntesis.
- Vicente Pedraz, M. (1987). Teoría pedagógica de la actividad física. Madrid: Gymnos.



Related Websites

Website for the UCAM Department of Physical Activity and Sports Sciences
http://www.ucam.edu/estudios/grados/cafd
Website for the Journal of the Department of Physical Activity and Sports Science with all
types of articles related to the introduction to Sport http://ccd.ucam.edu
Website of the Superior Council for Sports (CSD). Sport and society.
http://www.csd.gob.es/csd/sociedad
Website of the Ministry for Education, Culture and
Sport. http://www.educacion.gob.es/portada.html
Website for the European Space for Higher Education
http://www.eees.es
Website for the UCAM digital library, which contains useful tools for finding
information http://www.ucam.edu/biblioteca/biblioteca-digital/acceso-ucam
Website of free access database for researching information http://dialnet.unirioja.es
https://www.educacion.gob.es/teseo/irGestionarConsulta.dohttp://www.redalyc.org/home.oa
www.mcu.es/libro/CE/AgencialSBN/BBDDLibros/Sobre.htmlhttp://www.rebiun.org/Paginas/l
nicio aspx

Study Advice

- Active and critical participation during class facilitates assimilation of the subject content.
- Elaboration of individual notes encourages preparation for exams, avoiding misunderstanding of materials provided by the teacher.
- The recommended bibliography in each subject will help to stay up to date in each subject.
- Attending tutorials, practicals, workshops and seminars allows the student to successfully carry out assignments, dealing with both the general guidelines and the formal conditions for compulsory completion.
- Follow the subject calendar to avoid missing submission dates for assignments, exams, etc.
- Following the virtual campus, email and/or notice board on a daily basis will allow the student to stay informed of possible notices during the course of the semester.

Teaching Material

- For the correct development of the subject, the student should have the necessary passwords to access the Computer classrooms, the Library and the University's virtual campus. During these practices in the computer classrooms, all students will have access to a computer and the internet.
- During the theoretical-practical classes in the classroom, a computer and projector will be used for presenting theoretical content. The teams will be provided with Microsoft Office



Powerpoint software or similar to help the teacher to use the guideline presentations with the students in order to follow the class and make their own notes.

- To carry out workshops, seminars and tutorials, the material provided by the teacher will be enough (activity spreadsheets are fundamental) and Microsoft Office Word and Microsoft Office Powerpoint software or similar.
- Other bibliography materials will be pointed out and/or provided by the teacher during the development of different topics. In particular, scientific articles and repots will be shared through the Virtual Campus.

Tutorials

Brief description

Academic tutorial

In the academic tutorial, the Decree no. 359/2009, of 30th October will be implemented so that an educational response is established and regulated in relation to the diversity of the student body in the Autonomous Community of the Murcia Region. As has been explained in the Methodology section of this guide, the general aim of tutorials is to guide the students in the elaboration and presentation of their work. The aim is for all students to learn about the stylistic regulations for the formal presentation of written work, to understand the importance of these regulations for the transfer of knowledge, respecting professional deontology and the implementation of this in their academic work. In particular, it aims to achieve the following objectives:

- To learn the most commonly used stylistic rules in Physical Activity and Sports Science.
- To assimilate the basic formal rules for presentation of work (according to APA regulations).
- To understand the importance of the requirements of uniformity to encourage the exchange of knowledge.

Methodology in the tutorials will combine theoretical explanations with performance of practical activities. The practical activities will be worked on in small groups. As a training activity, the elaboration of bibliographic references and quotes will be suggested: to find citation and referencing errors and to correct them, to identify references or create a list of bibliographic references from a series of documented sources, among others.

Evaluation will be carried out through the assessment of formal presentation of work and activity on the subject, which should be carried out according to the stylistic rule explained in the tutorials (Regulations of the American Psychological Association - APA regulations).

Personal tutorial

The University also has a Specialised Body of Tutors who give personal tutorials to the students registered on the Degree. The personal tutor accompanies the students during the whole university phase. Please consult the following link:

http://www.ucam.edu/servicios/tutorias/preguntas-frecuentes/gue-es-tutoria