Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 281204 **Name:** Statitics and Data Processing

Credits: 6,00 **ECTS Year:** 2 **Semester:** 2

Module: 1) Basic Training Module

Subject Matter: Behavioral and social foundations of human motor skills. **Type:** Basic Formation

Field of knowledge: Health Sciences

Department: Basic Sciences and Cross-disciplinary Subjects

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

1164DT	Gustavo Daniel Represas Lobeto **(Responsible Lecturer)**	gd.represas@ucv.es
282A	Mario Zacares Gonzalez **(Responsible Lecturer)**	mario.zacares@ucv.es
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282C	Mario Zacares Gonzalez **(Responsible Lecturer)**	mario.zacares@ucv.es
282D	Gustavo Daniel Represas Lobeto **(Responsible Lecturer)**	gd.represas@ucv.es
282X	Arnau Oliver Peretó **(Profesor responsable)**	arnau.oliver@ucv.es

Module organization

1) Basic Training Module

Subject Matter	ECTS	Subject	ECTS	Year/semester
Biological and Mechanical Foundations of Human Motor Skills	36,00	Biochemistry and Human Physiology	9,00	1/2
		Biomechanics of Physical Activity	6,00	2/1
		Human Anatomy	9,00	1/2
		Kinesiology	6,00	2/1
		Physiology of Exercise	6,00	2/1
Behavioral and social foundations of human motor skills.	24,00	History and Sociology of Physical Activity and Sport	6,00	1/2
		Sport Psychology	6,00	1/2
		Statitics and Data Processing	6,00	2/2
		Technology Applied to Physical Activity and Sport	6,00	1/1

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	Summarize, evaluate, and contrast statistical data related to physical and sports activity based on the scientific method.
R2	Critically analyze and interpret statistical research results in the field of Physical Education and Sports Sciences.
R3	Perform basic statistical analyses in the context of Physical Education and Sports Sciences using specific data processing programs.

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):

	Weighting			
	1	2	3	4

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3	60,00%	Written and/or practical tests.
R1, R2, R3	15,00%	Individual or Group Work / Project.
R1, R2	5,00%	Self appraisal.
R1, R2, R3	20,00%	Non-face-to-face autonomous work.

Observations

-The student may keep the assessment instruments passed during the 3 years following the first registration, if the teacher considers it appropriate.
-It is necessary to obtain 50% in the following instruments (if this criterion is not met, the student will be graded with a maximum of 4.5 in this exam session):
·Written and/or practical tests
·Individual or group work/project
·Autonomous work not in attendance
- According to article 4.2. of the UCV Evaluation Guidelines, the limit of absences that may be due to eventualities (medical consultation, bureaucratic procedures...) that do not have to be justified, is 30%.

The detailed explanation (procedure of the tasks) as well as the evaluation instruments (cards or rubrics) of each section will be published on the platform of each group at the student's disposal.

Learning activities

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

M1 Attendance at practices.

M2 Resolution of problems and cases.

M3 Discussion in small groups.

M4 Practical laboratories.

M5 Presentation of content by the teacher.

M6 Practical lesson.

M7 Group dynamics and activities.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
THEORETICAL CLASS: Presentation of contents by the teacher. Competency analysis. Demonstration of capabilities, skills and knowledge in the classroom. M5	R1, R2, R3	32,00	1,28
PRACTICAL CLASS / SEMINAR: Group dynamics and activities. Resolution of problems and cases. Practical laboratories. Data search, computer classroom, library, etc. Meaningful construction of knowledge through student interaction and activity. M3, M4, M6	R1, R2, R3	20,00	0,80
EVALUATION: Set of oral and/or written tests used in the evaluation of the student, including the oral presentation of the final degree project. M6	R1, R2, R3	4,00	0,16
TUTORING: Supervision of learning, evolution. Discussion in small groups. Resolution of problems and cases. Presentation of results before the teacher. Presentation of diagrams and indexes of the proposed works. M5	R1, R2, R3	4,00	0,16
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Problem solving. Preparation of exercises, memoirs, to present or deliver in classes and/or in tutoring. M3, M7	R1, R2, R3	20,00	0,80
SELF-EMPLOYED WORK: Study, Individual preparation of exercises, assignments, reports, to present or deliver in classes and/or in tutoring. Activities in platform or other virtual spaces. M2, M3	R1, R2, R3	70,00	2,80
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
1. Introduction to Statistics.	Introduction to Statistics.
2. Descriptive statistics on one and two variables.	Descriptive statistics on one and two variables.
3. Introduction to probability.	Introduction to probability.
4. Random variables and probability distributions.	Random variables and probability distributions.
5. Introduction to Statistical Inference.	Introduction to Statistical Inference.
6. Confidence interval estimation.	Confidence interval estimation.
7. Hypothesis testing	Hypothesis testing

Temporary organization of learning:

Block of content	Number of sessions	Hours
1. Introduction to Statistics.	1,00	2,00
2. Descriptive statistics on one and two variables.	6,00	12,00
3. Introduction to probability.	3,00	6,00
4. Random variables and probability distributions.	5,00	10,00
5. Introduction to Statistical Inference.	1,00	2,00
6. Confidence interval estimation.	5,00	10,00
7. Hypothesis testing	9,00	18,00

References

REFERENCES:

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

Martín, G. (2007). *Introducción a la estadística.* Ed: Universidad Católica de Valencia San Vicente Mártir.

González, M. T. y Pérez de Vargas, A. (2009). *Estadística Aplicada. Una visión instrumental*. Ed: Díaz de Santos.