Information about the subject

Degree: Bachelor of Sciences of Physical Activity and Sport

Faculty: Faculty of Physical Activity and Sport Sciences

Code: 281004 **Name:** Statistics

Credits: 6,00 **ECTS Year:** 1 **Semester:** 2

Module: 1) Common Basic Training Module.

Subject Matter: Statistics **Type:** Basic Formation

Field of knowledge: Applied Science and Managementand

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

Module organization

1) Common Basic Training Module.

Subject Matter	ECTS	Subject	ECTS	Year/semester
Psychology	12,00	Basic Psychology	6,00	1/1
		Sports Psychology	6,00	2/1
Human Anatomy	6,00	Human Anatomy	6,00	1/1
Biochemistry	6,00	Biochemistry	6,00	1/1
Human Physiology	6,00	Human Physiology	6,00	1/2
Statistics	6,00	Statistics	6,00	1/2
Sociology	6,00	Sociology. Sports Sociology	6,00	2/2
History of physical activity	6,00	History of Physical Activity	6,00	2/2

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 Students will be able to make a descriptive stadistical analisys and interpret the results correctly.

R2 Students will be able to identify the main probability distributions and use them for solving real problems.

R3 Students will be able to apply inferential techniques and interpret the results correctly.

R4 Students will be able to solve practical problems by means of statistical software.

R5 Understand research articles in which statistical methods have been used and be able to rigorously transmit their content.

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		
CG5	Plan and organize any activity efficiently		x		
CG7	Be capable of critical reasoning using the knowledge gained				x
CG9	Knowing and complying with the professional ethics necessary to work		x		
CG10	Develop skills to adapt to new situations and autonomous learning				x
CG11	Develop skills for creativity, initiative and entrepreneurship	x			
CG13	Being able to apply theoretical knowledge in practice				x
CG14	Use Internet well as communication and as a source of information			x	
CG18	Being able to assess themselves			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	

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5	60,00%	Written/oral and/or practical tests.
R1, R2, R3	15,00%	Completion of a project.
R1, R2, R3, R4, R5	5,00%	Student self-assessment.
R3, R4, R5	20,00%	Autonomous work.

Observations

To pass the subject in the first enrolment will be mandatory:
Get a minimum mark of 5.

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.

M3 Resolution of problems and cases.

M5 Discussion in small groups.

M6 Practical lesson.

M7 Internship assistance.

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 M3, M5, M6	R1, R2, R3, R4, R5	21,00	0,84
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	9,00	0,36
EVALUATION: Set of oral and / or written tests used in the evaluation of the student, including the oral presentation of the final project. M3	R1, R2, R3, R4, R5	5,00	0,20
THEORETICAL CLASS: Presentation of content by the teacher. Competency analysis. Demonstration of skills, abilities and knowledge in the classroom. M1, M5	R1, R2, R3, R5	25,00	1,00
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. M3	R4, R5	31,00	1,24
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	59,00	2,36
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 1. Descriptive Statistics	Lesson 1. Variables and frequencies. Lesson 2. Descriptive statistics for one variable
Unit 2. Probability	Lesson 3. Introduction to probability Lesson 4. Discrete probability distributions Lesson 5. Continuous probability distributions
Unit 3. Statistical inference	Lesson 7. Confidence limits Lesson 8. Hypothesis testing

Temporary organization of learning:

Block of content	Number of sessions	Hours
Unit 1. Descriptive Statistics	8,00	16,00
Unit 2. Probability	9,00	18,00
Unit 3. Statistical inference	13,00	26,00

References

BASIC BIBLIOGRAPHY:

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.

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).

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.

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

Molina-García, J., Castillo, I., Pablos, C., & Queralt, A. (2007). La práctica de deporte y la adiposidad corporal en una muestra de universitarios Descargar. Apunts. Educación física y deportes, 3(89), 23-30.

Romero-Franco, N., Martínez-Amat, A., & Martínez-López, E. J. (2016). Efecto del entrenamiento propioceptivo en atletas velocistas / Effect of the proprioceptive training in sprinters. Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte, 13(51), 437-451. Recuperado de http://cdeporte.rediris.es/revista/revista51/artefecto393.htm

Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

[X] Microsoft Teams

[X] Kaltura

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

X	Microsoft Teams
X	Kaltura

Explanation about the practical sessions:

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

[X] The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

[ ] The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: