VNIVERSITAT ĠID VALÈNCIA

COURSE DATA

Data Subject	
Code	33935
Name	Statistics
Cycle	Grade
ECTS Credits	6.0
Academic year	2022 - 2023

Study (s)			
Degree	**Center**	**Acad. year**	**Period**
1205 - Degree in Human Nutrition and Dietetics	Faculty of Pharmacy and Food Sciences	1	Second term

Subject-matter		
Degree	**Subject-matter**	**Character**
1205 - Degree in Human Nutrition and Dietetics	5 - Statistics	Basic Training

Coordination	
Name	**Department**
IÑIGUEZ HERNANDEZ, MARIA DEL CARMEN	130 - Statistics and Operational Research
PEIRO RAMADA, JUAN JOSE	130 - Statistics and Operational Research

SUMMARY

This course aims to provide students with the tools and basic concepts of Statistics which are necessary to state statistical hypotheses, recognize simple probabilistic models, analyse data obtained by either direct observation of the environment or as a result of controlled experiments in laboratories, and make decisions based on the conclusions drawn from this analysis. An additional purpose of this course is to motivate students in the study and application of Statistics, using the proper tools to solve real problems.

PREVIOUS KNOWLEDGE

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Relationship to other subjects of the same degree

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

Other requirements

There are no recommendations as this is an introductory course.

OUTCOMES

1205 - Degree in Human Nutrition and Dietetics

- Design simple experiments that may be useful to achieve the objectives of the study.
- Describe and synthesise the dataset observed in the experiment.
- Analyse the data observed using a statistical package.
- Interpret the results provided by statistical packages.
- Prepare and present a report of the experimental study conducted.
- Be familiar with statistics applied to health sciences.

LEARNING OUTCOMES

This course aims to encourage the students to:

- Work together.
- Plan and organize the work.
- Express suitably their thoughts and decisions.

DESCRIPTION OF CONTENTS

1. Unit 1: Introduction to Statistics and Exploratory Data Analysis.

Introduction to Statistics
Sample description.
Population description: Introduction to Probability

2. Statistical analysis of a variable

Inference on proportions
Inference on a population mean

3. Statistical analysis of more than one variable

Comparison of two population means
Comparison of more than two population means
Comparison of categorical variables

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Seminars	10,00	100
Tutorials	2,00	100
Development of group work	10,00	0
Study and independent work	20,00	0
Preparation of evaluation activities	20,00	0
Preparing lectures	20,00	0
Preparation of practical classes and problem	20,00	0
TOTAL	**147,00**	

TEACHING METHODOLOGY

Theory classes will be devoted to develop the agenda and raise problems whose solution requires the methodology corresponding to each subject. We will introduce the appropriate statistical technique and apply it to solve proposed problems using statistical software. For the preparation of the course the student will have a collection of proposed problems, separated by subjects, which they will have to resolve on their own. The practical sessions will take place in a computer room and will be synchronized with the theory; they will allow the student to solve problems by applying the statistical procedures

EVALUATION

The knowledge acquired both in theory and practical sessions will be evaluated together, by means of an exam which may require the interpretation of results presented in the standard statistical software format used throughout the course. This evaluation will represent the 70% of the final grade. The remaining 30% of the final grade will come from work evaluated throughout the course (20%) and seminars (10%).

Case studies and practical work (20% of the final grade) will be conducted in groups of no more than 3 students. Each group will write its own report with resolution of the proposed tasks. To pass the course you must have at least a grade of 4/10 both in final grade and practical works.

Practical work evaluated throughout the course is done in group and computer lab so it is not recoverable.

REFERENCES

Basic

- Samuels, M.L., Witmer, J.A. y Schaffner, A. (2012). Fundamentos de Estadística para las Ciencias de la Vida (4a ed.) Pearson Educación S.A.

Additional

- Bower, J.A. (2009). Statistical Methods for Food Science. Wiley-Blackwell.