

1. BASIC INFORMATION

Course	Statistics applied to psychology
Degree program	Bachelor's degree in psychology
School	Faculty of Health Sciences
Year	1
ECTS	6
Credit type	Basic
Language (s)	Spanish / English
Delivery mode	On campus / Virtual
Semester	2
Academic Year	2025-2026
Coordinating professor	Marc Carrasco Reig

2. PRESENTATION

In this subject, the student will be able to collect, analyse, and interpret data of psychological nature. The student will become aware of the importance of statistics in analysing human behaviour in order to draw conclusions from it, while maintaining a critical perspective on statistical models. Additionally, the student will ground statistical analysis in Psychology within the framework of the scientific method.

3. LEARNING OUTCOMES

Knowledge

KWO08. Know different research designs, the procedures for formulating and testing hypotheses and for interpreting results, and be able to apply them.

KWO10. Know the correct use of the English language in the industry, both for specialised and non-specialised audiences.

KWO11. Be able to identify differences, problems and needs, as well as a professional approach to them.

Competences

CP06. Know how to select and manage tools, products and services, and be able to identify relevant people and groups.

CP07. Know how to design and adapt tools, products and services according to prerequisites and restrictions.

CP08. Know how to compare and validate tools, products and services (prototypes and pilot tests).

CDC02. Transmit messages (ideas, concepts, feelings, arguments), both orally and in writing, strategically aligning the interests of the different stakeholders involved in the communication in the academic and professional environment.

CDC05. Cooperate with others in academic and professional shared goals, participating actively, empathically and exercising active listening and respect to all members.

CDC06. Integrate analysis with critical thinking in a process of evaluating different ideas or professional possibilities and their potential for error, based on evidence and objective data leading to effective and valid decision-making.

LEARNING OUTCOMES

When students finish the subject, they will have knowledge of:

- How to collect, analyse and interpret data.
- The importance of statistics in the analysis of human behaviour.
- A critical view of assessment systems and statistical models.
- Different scientific methodologies and how to use them.

4. CONTENT

Introduction to Statistics

- Introduction
- General concepts
- Variables: classification and notation
- Summation

Data Organization and Position Measurements

- Frequency distributions
- Percentiles

Measures of Central Tendency and Measures of Variation

- Measures of central tendency (arithmetic mean, median, mode, etc.)
- Measures of variation (variance, standard deviation, and other measures of variation)

Typical Scores and Derived Scales

Linear Correlation

- Graphical representation of a relationship
- Quantification of a linear relationship
- Assessment and interpretation of a linear relationship
- Correlation matrix

Linear Regression

- Linear functions
- Simple linear regression

Other Statistics: Mean Differences and Distribution Differences

5. TEACHING-LEARNING METHODOLOGIES

The types of teaching-learning methodologies used are indicated below:

- Case method
- Student oral presentations

- Problem-based learning
- Lectures
- Use of computer programs

6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

Campus-based mode:

Learning activity	Number of hours
Case analysis	10
Debates	5
Practical Exercises	20
Formative evaluation (knowledge tests and lecturer feedback)	5
Research	10
Lectures	25
Problem solving	20
Face-to-face tutoring	5
Autonomous work	50
TOTAL	150

Virtual mode:

Learning activity	Number of hours
Online forums	20
Debates and discussions via virtual seminar	10
Webinar	20
Autonomous work	50
Case analysis	10
Problem solving	20
Formative evaluation (knowledge tests and lecturer feedback) via webconference	5
Research (scientific/case studies) and Projects	10
Virtual tutoring	5
TOTAL	150

7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

Campus-based mode:

Assessment system	Weight
Learning folder	5%
Case analysis and activities	5%
Reports and written work	20%
Posters	10%
Face-to-face knowledge test	60%

Virtual mode:

Assessment system	Weight
Learning folder	5%
Case analysis and activities	5%
Reports and written work	20%
Posters	10%
Virtual knowledge test	60%

When you access the course on virtual Campus, you'll find a description of the assessment activities you have to complete, as well as the delivery deadline and assessment procedure for each one.

7.1. Ordinary call period

Campus-based mode:

To pass the course in the Ordinary call period you must obtain a grade greater than or equal to 5,0 out of 10,0 in each of the assessment systems of the course.

If cases of plagiarism are detected in any of the activities delivered, the grade will be **0** and this activity will be suspended during the Ordinary call period. **Late delivery of activities is not allowed either (it will be evaluated with a "0"), except in duly justified cases.** These activities must be recovered in Extraordinary call period, applying rules of the assessment period.

Finally, to pass the course in the Ordinary Exam period, **a minimum of 50% of class attendance is required. Absence excuses do not imply the elimination of such absences in any case.**

The European University of Valencia establishes the continuous assessment as a system of evaluation of knowledge, Skills and basic, general, cross-disciplinary and specific Competencies of the qualification of "Bachelor's Degree in Psychology", in accordance with the provisions of the Regulations for the

evaluation of Bachelor's Degrees. In this regard and for the purposes of the consumption of calls the student must be aware that, if he/she presents any assessment system provided in the Learning Guide, in the Ordinary Exam period the student will have a global grade of the course, thus consuming call for entries.

Virtual mode:

To pass the Subject in Ordinary call period you must obtain a grade greater than or equal to 5,0 out of 10,0 in the final grade (weighted average) of the course.

In any case, it will be necessary to obtain a grade greater than or equal to 5,0 in the final test, so that it can be averaged with the rest of the activities.

If cases of plagiarism are detected in any of the activities submitted, the grade will be **0** and this activity will be suspended during the Ordinary call period. **Late delivery of activities is not allowed either (it will be evaluated with a "0"), except in duly justified cases.** These activities must be recovered in Extraordinary call period, applying the same rules in that call for entries.

The European University of Valencia establishes the continuous assessment as a system of evaluation of knowledge, Skills and basic, general, cross-disciplinary and specific Competencies of the qualification of "Bachelor's Degree in Psychology", in accordance with the provisions of the Regulations for the evaluation of Bachelor's Degrees. In this regard, and for the purposes of the consumption of entries, the student must be aware that, if he/she presents any assessment system provided in the Learning Guide, in the Ordinary call period the student will have an overall grade for the course, thus consuming a call for entries.

7.2. Extraordinary call period

Campus-based mode:

To pass the course during the Extraordinary call period you must obtain a grade higher than or equal to 5,0 out of 10,0 in each of the Assessment systems of the course.

Activities not passed in the Ordinary call period must be handed in, after having received the corresponding corrections from the teacher, or those that were not handed in.

The European University of Valencia establishes the continuous assessment as a system of evaluation of knowledge, Skills and basic, general, cross-disciplinary and specific Competencies of the qualification of "Bachelor's Degree in Psychology", in accordance with the provisions of the Regulations for the evaluation of Bachelor's Degrees. In this regard and for the purposes of the consumption of calls the student must be aware that in the Extraordinary callperiod will be the Objective Test of Knowledge (POC) which determines whether or not consumes call for entries and in the exceptional case that only has pending to overcome assessment system/s other than the POC, it will be considered NP if it does not present it/s and will obtain numerical grade if it presents at least one of them.

Virtual mode:

To pass the Subject in Extraordinary call period you must obtain a grade greater than or equal to 5,0 out of 10,0 in the final grade (weighted average) of the course.

In any case, it will be necessary to obtain a grade greater than or equal to 5,0 in the final test, so that it can be averaged with the rest of the activities.

Activities not passed in the Ordinary call period must be handed in, after having received the corresponding corrections from the teacher, or those that were not handed in.

The European University of Valencia establishes the continuous assessment as a system of evaluation of knowledge, Skills and basic, general, cross-disciplinary and specific Competencies of the qualification of "Bachelor's Degree in Psychology", in accordance with the provisions of the Regulation of evaluation of the Bachelor's Degrees. In this regard and for the purposes of the consumption of entries the student must be aware that in the Extraordinary exam period will be the Objective Test of Knowledge (POC) which determines whether or not consumes call for entries and in the exceptional case that only has pending to overcome assessment system/s other than the POC, will be considered NP if not presented and will obtain a numerical grade if you present at least one of them.

8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Campus-based mode:

Assessed activities	Deadlines
Learning folder	Fourth week of March
Case analysis and activities	First week of April
Reports and written work	First week of May
Posters	Second week of May
Face-to-face knowledge test	Date set by the university based on the academic calendar

Virtual mode:

Assessed activities	Deadlines
Learning folder	Fourth week of april
Case analysis and activities	Fourth week of may
Reports and written work	First week of june
Posters	Second week of june
Virtual knowledge test	12-14 of june

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any change as and when appropriate.

9. BIBLIOGRAPHY

The main references work for this subject are:

Spanish:

- Botella, J., Suero, M., y Ximénez, C. (2012). Análisis de datos en Psicología I. Pirámide.
- Navarro, D. J., y Foxcroft D. R. (2019). Learning statistics with jamovi: a tutorial for psychology students and other beginners. <https://doi.org/10.24384/hgc3-7p15>
- Suárez Falcón, J. C., Recio Saboya, P., San Luis Costas, M. C., y Pozo Cabanillas, M. P. (2019). Introducción al análisis de datos. Aplicaciones en psicología y ciencias de la salud. Sanz y Torres.

English:

- Coolican, H. (2013). Research methods and statistics in psychology. Routledge.
- Navarro, D. J., y Foxcroft D. R. (2019). Learning statistics with jamovi: a tutorial for psychology students and other beginners. <https://doi.org/10.24384/hgc3-7p15>

The recommended Bibliography are:

- Andy Field's 'Statistics Hell': www.statisticshell.com
- Khan Academy: <http://www.khanacademy.org/math/probability>

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. ONLINE SURVEYS

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs and the teaching-learning process.

The surveys will be made available in the "surveys" section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.