



COURSE UNIT INFORMATION SHEET (SYLLABUS)

2020/2021

Name Statistics Applied to Psychology
Teaching staff (Also indicate the Professor in charge) Sérgio Moreira (Professor in charge)
ECTS 6
Functioning 2 hours per week of theoretical / practical classes, 2 hours per week of practical classes, total of 14 weeks
Learning goals Know, perform and interpret statistical tests of data analysis most common in Psychology
Skills to be developed 1. Apply and interpret the most common methods of analyzing parametric and non-parametric data. 2. Apply and interpret the assumptions for analyzing parametric data. 3. Use the R statistical software.
Prerequisites (precedences) * Not applicable
Contents 1. The model comparison approach; null model and proposed model 2. Statistical models for hypothesis testing with parametric data:



- 2.1. Model with a dependent variable and continuous predictor (simple linear regression)
- 2.2. Model with a continuous dependent variable and dichotomous predictor (linear regression with dummy and t test)
- 2.3. Model with a continuous dependent variable and a categorical predictor (linear regression with dummies and 1 factor anova)
- 2.4. Model with a continuous dependent variable and several continuous predictors (multiple linear regression, hierarchical multiple linear regression)
- 2.5. Model with a continuous dependent variable and continuous and categorical predictors (multiple linear regression, factorial anova, ancova)
3. Assumptions for analyzing parametric data:
 - 3.1. Outliers, error distribution, homogeneity of variances and multicollinearity
 - 3.2. Alternatives to parametric tests
4. Limitations of linear models

Bibliography

Field, A. (2009). Discovering statistics using SPSS (3th edition). London: Sage Publications.
Wheelan, C. (2013). Naked statistics: Stripping the dread from the data. WW Norton & Company.

Teaching methods

Theoretical classes: 2 hours a weekly, introduction of concepts, presentation of practical exercises.
Practical classes: 2 hours a week, practical exercises using SPSS.

Evaluation Regimes (General and/or Alternative)

The approval in the UC is conditional to the completion of the evaluation elements 1 and 2 plus an optional element 3.
The final grade corresponds to the sum of the partial grades.

1. Group work (mandatory). It consists in a brief scientific report with an introduction, analysis and interpretation of data related to a research problem, to be presented in the practical classes, by all elements of the group. The specific characteristics of the work and evaluation criteria will be made available in class.
2. Intermediate individual assessment (optional but recommended).
3. Final individual exam (mandatory).

In the event of a new state of emergency, an alternative assessment plan will be adopted in which:

1. The group work will be presented in a synchronous online session;
2. The interim individual assessment and the final individual assessment will be done in an online questionnaire format.



Evaluation Elements (Dates due, weights, minimum required grades) Each evaluation element has the following weight: 1. Group work: Total of 6 values, enrollment according to the schedule provided by the teacher. 2. Intermediate individual assessment: Total of 4 values, enrollment according to the schedule provided by the teacher. 3. Final individual exam: Total of 10 values, enrollment according to the academic calendar. To pass in this course students need a minimum grade of 4.5 values (out of 10) in the final exam. The final grade corresponds to the sum of the partial grades.
Rules for grade improvement It is only possible to improve the grade if the student has obtained a final classification in the course. Only the element of evaluation 3 is subject to improvement of grade from 1st to 2nd season exams.
Rules for students having previously failed the course unit * Repeating students who performed the group work in the academic year 2019/2020, can keep the grade obtained if they wish. Repeating students who performed the practical work in years prior to 2019/2020, do not maintain the grade, having to do new practical work. Class attendance is not mandatory, but it is advised to all students.
Requirements on attendance and punctuality Class attendance is not mandatory, but it is advised to all students.
Rules for special students (workers, elite athletes, student body leaders, military, fathers/mothers, with special needs) * Not applicable
Language of instruction Portuguese
Disciplinary violations and penalties



According to the Evaluation of Learning Regulation of the Faculty of Psychology of the University of Lisbon, the following behaviors are considered as disciplinary offenses subject to disciplinary action:

- a) To use or attempt to use materials, information, notes, study resources or other objects and equipment not authorized in academic exercises;
- b) To help or try to help a colleague in committing a disciplinary offense;
- c) To submit the same written work for evaluation in different course units without permission from the instructors, even if with minor changes;
- d) To present someone else's work as one's own;
- e) To forge, or change without permission from the author, any information or citation in an academic work;
- f) To interfere, change or attempt to change grades;
- g) To try to prevent or interfere with the proper functioning of classes, research or other academic activities;
- h) To make false accusations regarding instructors, governance bodies, other students or non-teaching staff of the FPUL;
- i) To falsify signatures in attendance sheets, documents relating to evaluation elements or in any official document relating to an academic process or status.

Disciplinary offenses committed in any assessment element can lead to its annulment, and must be reported to the Pedagogical Council or, considering their gravity and repetition, may lead to other penalties, to be determined by the Rector of the University of Lisbon.

* If applicable