

ID	2819
Curricular Unit	Statistics II
Regent	Ana Isabel Andrade Dinis Carita
Learning Outcomes	The objectives of this course are to: (i) provide students with basic knowledge of statistical inference, parametric and nonparametric, that allow the processing of data related to their future professional and scientific activities; (ii) develop the ability to use a statistical software (in case, the SPSS).
Syllabus	<ol style="list-style-type: none"> 1. Statistical inference for two populations <ol style="list-style-type: none"> 1.1. Independent samples 1.2. Matched samples 1.3. Practical applications with SPSS 2. Statistical inference for several populations <ol style="list-style-type: none"> 2.1. Independent samples 2.2. Repeated measures 2.3. Practical applications with SPSS 3. Statistical inference for proportions <ol style="list-style-type: none"> 3.1. Inference for a single proportion 3.2. Inference for two population proportions with independent samples 3.3. Practical applications with SPSS 4. Chi-square tests <ol style="list-style-type: none"> 4.1. Chi-square goodness of fit test 4.2. Chi-square test for independence 4.3. Chi-square test for homogeneity 4.4. Practical applications with SPSS 5. Linear regression <ol style="list-style-type: none"> 5.1. Simple linear regression 5.2. Multiple linear regression 5.3. Practical applications with SPSS
Evaluation	The approval in the course is obtained with final score greater than or equal to 10. The assessment can be done in two ways: continuous assessment or a final exam. In either mode of assessment it is possible for students, with a score greater than or equal to 9.0 values, and upon teachers approval, to do an oral exam. During the assessments it is forbidden to use mobile phone. Continuous assessment: 2 tests, the final score is the weighted average, such that, final score = $0.6 \times 1\text{st test score} + 0.4 \times 2\text{nd test score}$, provided that the criteria for the minimum score of 8.0 on each test is verified. Assessment by final exam: the final exam is to be carried out at the normal or recourse periods (and also in special exam period for students who have special status).

Bibliography

Main bibliography:

Bruno, P., Carita, A., Diniz, A., Gonçalves, I., e Teles, J., Tópicos de Estatística – Texto de apoio para a unidade curricular de Estatística II dos cursos de licenciatura da FMH, manual não editado.

Complementary bibliography:

Bruno, P., Carita, A., Diniz, A., Gonçalves, I., e Teles, J. (2008), Introdução à Teoria das Probabilidades, Lisboa: Edições FMH.

Bruno, P., Carita, A., Diniz, A., Gonçalves, I. e Teles, J., Tópicos de Estatística – Texto de apoio para a unidade curricular de Estatística I dos cursos de licenciatura da FMH, manual não editado.

Marôco, J. (2010), Análise Estatística com o PASW Statistics (ex-SPSS), Lisboa: Report Number.

Field, A. (2010), Discovering Statistics Using SPSS (3rd ed.), London: Sage.

Murteira, B., Ribeiro, C. S., Silva, J. A., e Pimenta, C. (2007), Introdução à Estatística (2ª ed.), Lisboa: McGraw-Hill.

Pestana, D., e Velosa, S. (2006), Introdução à Probabilidade e à Estatística (Vol. I, 2ª ed.), Lisboa: Fundação Calouste Gulbenkian.