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| N° ECUE | XA4S601 | | | | | | | | |
| Title | Inferential statistics (2) | | | | | | | | |
| ECTS 2 |  | Lecture(h)  CM : 15 |  | Tutorials (h)  TD : 15 |  | Pratical works (h) TP |  | Project (h) |  |
| Description  This is an introductory course in inferential statistics (following the Statistics (1) course – S5) designed to provide students with concepts of data analysis and statistical computing. In this course are presented the principle of tests, how to establish hypothesis, the concept of power, p-value etc. Topics covered include parametric and non-parametric tests: comparison of means, comparison of variances, independence, compliance to normal distribution ... Bivariate and multivariate methods are also presented: regression, classification, principal component analysis ...  Use of Excel and R software to conduct statistical analyses  Learning outcome  Apply the basics of inferential statistics by making valid generalizations from sample data.  Know how to apply a comparison test (of means, of variances ...)  Know how to adjust a linear regression  Know how to use and interpret current data analysis (ACP, AFC ...) | | | | | | | | | |
| Key Words | Parametric and nonparametric statistical tests, data analysis, linear regression, ANOVA | | | | | | | | |
| Type of Evaluation | The final grade is composed of short tests (25%), a practical work project (25%) and a final exam (50%). | | | | | | | | |