

STATISTICAL ANALYSIS

Academic year 2021/2022

WEEK	DAY	PLANNED CONTENT
1	10-Sep	Informations about the curricular unit including objectives, contents, bibliography and evaluation methods. LU1: Random variables.
2	17-Sep	LU1: Random variables. LU2: Probability distributions: Binomial and Poisson.
3	24-Sep	LU2: Probability distributions: Normal; Binomial approximation to Normal.
4	1-Oct	LU2: Probability distributions: Chi-Square, Students' t and F. LU3: Sampling statistics and sampling distributions. Sampling distribution of the mean; Central Limit Theorem; sampling distribution of the proportion.
5	8-Oct	LU4: Point estimation: properties of estimators.
6	15-Oct	LU5: Confidence interval estimation.
7	22-Oct	LU5: Confidence interval estimation: sample size determination. LU6: Hypothesis testing: notation and concepts.
	29-Oct	NO CLASS (break for trimester exams)
8	5-Nov	Clarification of doubts.
	6-Nov	TEST (LU1 - LU5) Saturday on Moodle (proposed schedule: 14:30-16:00)
9	12-Nov	LU6: Hypothesis testing for the mean, for the difference between means, for the proportion, and for the difference between proportions.
10	19-Nov	LU6: Hypothesis testing for the variance, for the ratio between variances, and for the correlation coefficient.
11	26-Nov	LU7: Analysis of variance.
12	3-Dec	LU7: Analysis of variance. Practical examples in Excel.
13	10-Dec	LU8: Nonparametric testing: introduction; distribution fitting tests.
14	17-Dec	LU8: Nonparametric testing: comparing independent samples; comparing paired-samples; Spearman's rank correlation test.
28 December		Assignment Report must be uploaded to the Moodle platform (one PDF file)
January		EXAM (about all topics, but more focused on LU6 - LU8) (see the masters' exams calendar on the website)