

SYLLABUS

Concepts of hypothesis testing: the power of a test, Fisher's exact test and the hypergeometric distribution, paired and unpaired  $t$  tests, ANOVA, the relations between one-way and two-way ANOVA and unpaired and paired  $t$  tests, contrasts, the honest significant difference procedure, regression as ANOVA, non-parametric procedures, the Wilcoxon one-sample and two-sample tests, the Kruskal-Wallis test, Walsh averages, the concept of asymptotic relative efficiency, correlation, rank correlation, the coefficient of concordance, partial and intraclass correlations, chi-square testing procedures, sampling from a finite population.