

INTRODUCTION TO BIOSTATISTICS (72H)

A) THEORETICAL MODULE

1. Introduction to the usefulness of statistics
2. Statistical vocabulary and common definitions
 - a. Recurring terms
 - b. Basic graphic representations
3. Before the statistical study :
 - a. Planning the experiment.
 - b. Choosing an appropriate method: descriptive statistics vs. inferential statistics (probability).
4. Descriptive parameters :
 - a. Of position: Mode, average, median.
 - b. Of dispersion: variance, standard deviation, quartiles.
 - c. Of shape: symmetry coefficients, drift and flattening.
 - d. Others: Covariance, correlation, linear regression.
5. Descriptive statistical tests :
 - a. Normality
 - b. Homoscedasticity
 - c. Parametric (Student t-tests, ANOVAs) and associated post-hoc tests
 - d. No-parametric
6. Aberrations

B) PRACTICAL MODULE: Exercises