Probabilités et statistiques

Lecturers
Thomas VERDEBOUT (Coordinator) and Jennifer ALONSO GARCIA

Course mnemonic
MATH-F315

ECTS credits
5 credits

Language(s) of instruction
French

Course period
First term

Course content

Part 1 : Probability Introduction to the basics of probability measure, random variables, independance, correlation. Part 2 : Statistics Introduction to estimators, confidence intervals and tests of hypothesis, for a proportion, a mean, a variance, the comparison of two proportions or means. Chi-square tests of adjustment, homogeneity and independance. Linear regression. ANOVA with one or two factors.

Objectives (and/or specific learning outcomes)

Goal : to teach the students the foundations of the statistical methods that they will use to analyse data.

Pre-requisits and co-requisits

Pre-requisites courses

MATH-F112 | Mathématiques 1 | 10 crédits and MATH-F114 | Algèbre linéaire et arithmétique | 5 crédits

Teaching method and learning activities

Teaching Method : ex-cathedra courses with lots of exampples presented in the domains of the students. Exercices sessions where the students analyse problems.

Contribution to the teaching profile

The course is taught in French, so please see the french version for details or send an email to tverdebo@ulb.ac.be if you need more details in English.

References, bibliography and recommended reading

Biblio : lecture notes available for students.

"Eléments de Statistique". C. Dehon , J.-J. Droesbeke , C. Vermandele, édité par l'Université Libre de Bruxelles et Ellipses.

Other information

Contact(s)

Thomas Verdebout. Email: tverdebo@ulb.ac.be

Evaluation method(s)

Other

Evaluation method(s) (additional information)

Assessment : written exam in January in two parts: one more theoretical, one with problems to solve

Programmes

Programmes proposing this course at the faculty of Sciences

BA-INFO | Bachelor in Computer science | unit 2

Programmes proposing this course at the faculty of Pharmacy

BA-PHAR | Bachelor in Pharmacy | unit 2