

UE Biostatistics, Bioinformatics, Modeling , Part II



ECTS
6 crédits



Composante
UFR Chimie-
Biologie



Période de
l'année
Toute l'année

- > **Langue(s) d'enseignement:** Anglais
- > **Ouvert aux étudiants en échange:** Oui
- > **Code d'export Apogée:** YAX9BI38

Présentation

Description

Course outline

At the end of the course, the students should be able to analyze a "omic" dataset. More precisely, they should be able.

- 1- to load, explore and summarize graphically a dataset.
- 2- to compute confidence interval estimates for proportions, means and variances.
- 3- to formulate hypotheses, compute tests statistics, interpret p-values and make practical decisions for the standard parametric and non-parametric tests.
- 4- to adjust simple and multiple linear models, analyses of variance (anovas), logistic regression, Cox model.
- 5- to select genes that explain a response variable by applying multiple testing approaches.
- 6- to analyze a data set of differential gene expression.

Heures d'enseignement

UE Biostatistics, Bioinformatics, Modeling , Part II - TD	TD	12h
UE Biostatistics, Bioinformatics, Modeling , Part II - CM	CM	27h

Période : Semestre 9

Compétences visées

Overview of the principal techniques of statistical data treatment, with an emphasis on practical skills and the use of the statistical software R.

Infos pratiques

Contacts

Responsable pédagogique

Adeline Leclercq-Samson

✉ adeline.leclercq-samson@univ-grenoble-alpes.fr

Lieu(x) ville

› Grenoble

Campus

› Grenoble - Domaine universitaire