Informatics and statistics

ECTS
3 crédits

Composante
UFR Pharmacie

Période de l'année
Automne (sept. à dec./janv.)

Diplômes intégrant cet élément

- Master Ingénierie de la santé

Langue(s) d'enseignement: Anglais

Ouvert aux étudiants en échange: Non

Présentation

Description

This course is devoted to a refresher course in statistics and computer science.

The objective of the first part is to train students to master the statistical methods used in the life and health sciences.

- Master the description of collected data
- Master the choice of a decision support tool (statistical test) in adequacy with the experimental context
- Master the concepts of modeling, regression, estimation of regression parameters, model validation and prediction
- Master the correct interpretation of the results obtained and know how to communicate them.

At the end of this part, the students will be able to carry out a work requiring the statistical tool or to carry out a critical study of an article, a survey or experiment using usual statistical methods.

The second part of the course will provide students with a basic knowledge of programming in order to make them autonomous and to provide a skill that is sought after and appreciated in the different fields of biotechnology and health.

Statistic (12h)

- Anova

Informations non contractuelles.
Dernière mise à jour le 30 juin 2026

- Chi-squared test
- Correlation
- Linear regression
- Logistic regression

Computer science (12h) :

Introduction to computer science and programming using Python :

- A notion of computation
- Python programming language
- Testing and debugging
- Data structure

Pré-requis recommandés

The pre-requisites required to follow this UE are:

- Summary Statistics
- Confidence intervals
- Hypothesis testing
- Independence t-test and paired t-test

Infos pratiques

Campus

Grenoble - La Tronche domaine de la Merci

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