

- Faculté des sciences
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Nonparametric statistics (3ST2007)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en statistique	Cours: 2 ph	contrôle continu: 1	3

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Printemps

Equipe enseignante:

Dr. Clément Chevalier
Institute of statistics

Objectifs:

The student gains some knowledge of nonparametric statistical methods. Emphasis is put on nonparametric tests for one or many related or unrelated samples, and on kernel density estimation.

Contenu:

- Nonparametric location comparison tests such as the median test, sign test, Wilcoxon's signed-rank test and Wilcoxon's sum of rank test (along with Mann-Whitney U test), Kruskal-Wallis and Friedman's test.
- Nonparametric goodness of fit tests (Kolmogorov-Smirnov, Cramer-Von Mises...).
- Histogram and Kernel density estimation.
- If time permits, nonparametric regression.

Forme de l'évaluation:

CA graded : written test 2 hours during the last week of the semester.

Reexamination next session (August-September) : 2h written test organized directly with the professor (not in Pidex)

Documentation:

Applied nonparametric statistical Methods (2007), Sprent P. and Smeeton N.C., Chapman & Hall.
Density estimation for statistics and data analysis, Silverman B.W., Chapman & Hall.

Forme de l'enseignement:

- 3 ECTS credits
- Compulsory course for master in statistics
- Spring Semester