## Faculty of Medecine

| IEPR1026 | Statistics |
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[15h+15h exercises] 3 credits

**Teacher(s):**          Isabelle De Macq (supplée null)
Language:               French
Level:                  First cycle

## Aims

At the end of the course the successful student will be able to use the techniques of inferential statistics within the framework of his/her research. The course focuses on the most frequently used statistical methods. The underlying mathematical developments are limited to a strict minimum and replaced by intuitive reasoning and concrete examples, especially via practical exercise sessions.

## Main themes

The course comprises theoretical lectures and exercise sessions:
1. Brief recall on one- and two-dimensional descriptive statistics
2. Inferential statistics: populations and samples, probabilities, variables, theoretical distributions, confidence intervals (means, variance, proportion), hypothesis testing based on sample means (Student t-test, analysis of variance, analysis of covariance, multiple comparisons), proportions (chi square, phi, contingency), correlations/regressions (significance, comparison, linearity), adjustment tests (chi square, KS), non-parametric tests (comparison of independant and dependant groups).
3. Application to capacity tests: classification of tests, quality of tests, validity and reproducibility.

## Content and teaching methods

Will be completed by the titular professor when the courses will be attributed

## Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Pre-requisite
Evaluation Written or oral examination, continuous evaluation
Support Syllabus or reference books
Supervision Titular professors
Others Exercise sessions + solutions to problems in groups of maximum 30 students

## Other credits in programs

| KINE13BA | Troisième année de bachelier en kinésithérapie et réadaptation | (3 credits) | Mandatory |
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| KINE1PM | Année d'études préparatoires au master en kinésithérapie et réadaptation (60) et au master en sciences de la motricité, orientation générale (120) | (3 credits) | Mandatory |