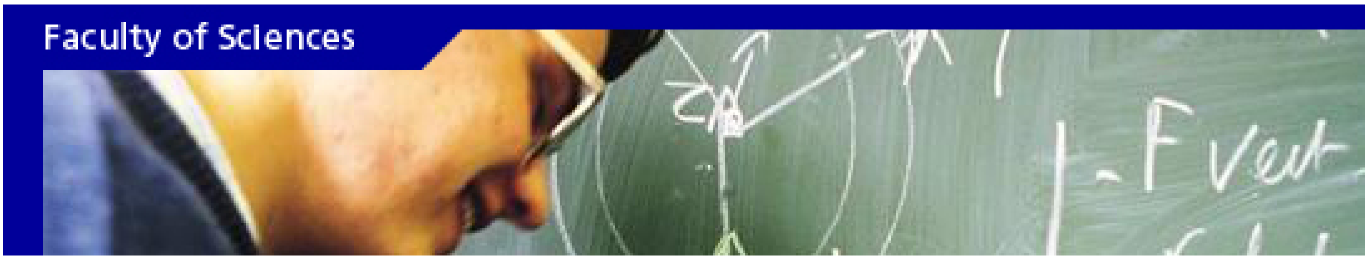

MAT1371 Probability

[30h+22.5h exercises] 5 credits

This course is not taught in 2005-2006
This course is taught in the 1st semester
Language: French
Level: First cycle

Aims

The course aims to give a basic knowledge of probability theory. It is an introduction to the main tools that are necessary to tackle the big problems of statistical analysis and stochastic processes. After this course, the student will be able to calculate conditional and non-conditional expectations and to study the convergence of sequences of random variables (including asymptotic law).

Main themes

The course requires a knowledge of measure theory. It covers the essential tools necessary for the study of statistics.
The following topics are covered :
Random variables, dependence and independence.
Expectations and conditional probability.
Convergence of sequences of random variables.
Martingales.

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

Prerequisite : MAT 1322: Measure theory