- Faculté des sciences
- www.unine.ch/sciences

Probability theory (3ST2001)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en statistique	**Cours: 2 ph** **Exercice: 2 ph**	**Voir ci-dessous**	6

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

Période d'enseignement:

- Semestre Automne

Equipe enseignante

Lecturer: Dr Hugues Mercier
Teaching assistant: Aïssatou Ndiaye

Objectifs

The student is able to master the basic tools from probability theory that are useful in numerous applications

Contenu

1. Counting and combinatorics
2. Axioms of probability
3. Conditional probability and independence
4. Discrete random variables
5. Continuous random variables
6. Jointly distributed random variables
7. Limit theorems

Forme de l'évaluation

CA graded : Continuous assessment with a two-hour written examination during the last week of the semester.
Makeup examinations: June or August-September of the same year (two-hour written examination organised directly with the lecturer (not in Pidex)).

Documentation

- Sheldon M. Ross. A First Course in Probability, Ninth Edition, Pearson Education Limited, 2014.
- Kenneth H. Rosen. Discrete Mathematics and Its Applications, Seventh Edition, Global Edition, McGraw Hill, 2013 (mostly for counting and the introduction to probability)

Forme de l'enseignement

- 6 ECTS, with 3 ECTS course and 3 ECTS exercices
- Autumn semester
- Compulsory course for the Master in Statistics