

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

### Probability theory (3ST2001)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en statistique</b>	<b>Cours: 2 ph Exercice: 2 ph</b>	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: Joé Brendel

#### 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