

- Faculté des sciences
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### Statistical analysis for survey research (UniNe) (3ME2003)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en méthodologie d'enquête et opinion publique</b>	<b>Cours: 4 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

Dr. Matti Langel  
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#### Objectifs

The objectives of the course are to provide students with:

- general knowledge in statistics and data analysis
- an introduction to probability theory and inferential statistics
- the ability to apply regression techniques and run model diagnostics.
- notions for more specific courses (statistical softwares, survey sampling, factorial methods and cluster analysis).

#### Contenu

This course covers a wide variety of topics in statistical analysis, including some practical applications. After a short review of descriptive statistics, the course will cover the main aspects of inferential statistics, including probability theory, statistical distributions, hypothesis testing and confidence intervals. The second half of the semester will be dedicated to statistical models such as linear regression (as well as logistic regression and mixed models if we have time). The R software will be used in practical applications.

#### Forme de l'évaluation

Students are assessed through a 2-hour written examination during the exam session of the Faculté des Sciences.

#### Documentation

Refer to general literature / bibliography of the POSM master program

#### Pré-requis

Students are expected to have taken introductory statistics courses in their bachelor program.