

Faculté des sciences

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# Introduction to survey statistics (UniNe) (3ME2001)

Filières concernées	Nombre d'heures		Crédits ECTS
Master en méthodologie d'enquête et opinion publique	Cours: 4 ph	Voir ci-dessous	6

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

## Période d'enseignement:

• Semestre Printemps

## Equipe enseignante

Prof. Dr. Beat Hulliger School of Business FNHW CH - 4600 Olten beat.hulliger@fhnw.ch

## Contenu

This course is about the statistical methods used in surveys.

The principle of random sampling and the main types of sample designs (simple random sampling, stratified random sampling, cluster sampling, two-phase sampling, rotational designs) are introduced and the classical estimators for these designs are treated. Enhancement of the estimators through the use of external auxiliary information using linear models is discussed. Classical and resampling variance estimation is treated.

The second part of the course will treat deviations from the paradigm of random sampling and how to deal with them. Frame deficiencies, unit and item non-response treatment, detection and treatment of erroneous data, in particular of outliers will be discussed.

http://moodle2.unil.ch/course/view.php?id=6803 Time 09:15 -13:00 - room B217

## Forme de l'évaluation

Students are assessed through a final examination (2h written exam) during the session of exams

## Documentation

Lohr, Sharon L. (2010): Sampling: Design and analysis (2nd ed), Boston: Brooks/Cole (Cengage Learning), ISBN 9780495105275

## Pré-requis

Students are expected to have knowledge and skills in applied statistics including testing and regression modelling as well as knowledge of the software R.

## Forme de l'enseignement

- Compulsory course for master in public opinion and survey methodology

- Spring Semester
- Course: 4 hours
- Teaching will be based on inputs from the lecturer and hands-on training with the statistical software R.