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

Generalized linear model (3ST2008)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en statistique	**Cours: 2 ph**	**controle continu: 1**	3

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

Période d'enseignement:

- Semestre Printemps

Equipe enseignante:

Dr.Alina Matei
Institut de Statistique
Av. de Bellevaux 51 , CH-2000 NEUCHATEL
Office phone :+41 32 718 13 27 - email : alina.matei@unine.ch

Objectifs:

At the end of the course, the students should be able to understand the principles, to apply the methods, and to correctly interpret the results of a data analysis based on a a Generalized Linear Model.

Contenu:

Introduction to the theory and applications of generalized linear models. Topics include logistic regression, multinomial regression, Poisson regression, contingency tables, etc.

Forme de l'évaluation:

A) First attempt
CA graded: written 2 hours exam during the last week of the semester.

Attendance
The students must attend the exam.

B) Second/third attempt

Retake exams
- 2h exam.

Retake exam deadline
- The exam will be organized by the teacher in agreement with the student, before the end of the corresponding exam session (not in Pidex).

Documentation:

- McCullagh, P, Nelder, JA, Generalized Linear Models, 2nd edition, Chapman & Hall, 1989

- Meyers, R.H., Montgomery D.C., Vinning G.G. and Robinson, T.J., Generalized Linear Models with applications in Engineering and the Sciences, 2nd edition, Wiley, 2010.

- Dobson A.J. and Barnett A.G., An Introduction to Generalized Linear Models, 3rd edition, Chapman & Hall, 2008.

- Faraway J.J., Extending the Linear Model with R, Generalized Linear, Mixed Effects and Nonparametric Regression Models, Chapman

& Hall, 2006.

Pré-requis:

- Faculté des sciences
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Generalized linear model (3ST2008)

Regression analysis and knowledge of R.

Forme de l'enseignement:

- Compulsory course for master in statistics
- Spring Semester
- Course + practical exercises on computer: 2 hours