

- Faculté des sciences
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### Generalized linear model (3ST2008)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en statistique</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3

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

#### Période d'enseignement:

- Semestre Printemps

#### Equipe enseignante

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#### Contenu

Introduction to the theory and applications of generalized linear models. Topics include logistic regression, multinomial regression, Poisson regression, etc. Applications in R.

#### Forme de l'évaluation

A) First attempt

CA graded: written 2 hours exam during the semester. The exam also includes a practical part in R on computer.

Attendance

The students must attend the exam.

B) Second attempt

Retake exams

- 2h exam (written 2 hours exam also including a practical part in R on computer).

Retake exam deadline

- The exam will be organized by the professor 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

Linear regression models, Inferential statistics and knowledge of R.

#### Forme de l'enseignement

- Compulsory course for master in statistics

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**Generalized linear model (3ST2008)**

- Spring Semester
- Course + practical exercises on computer: 2 hours