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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

prof. titulaire Alina Matei  
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#### Contenu

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

#### Forme de l'évaluation

CA graded: first attempt, written 2 hours test (in general, during the last week of the course). The test also includes a practical part in R.

In case of failure at the first attempt: written 2h test, including a practical part in R. The test is organized by the professor in agreement with the student, before the end of the corresponding session (not in Pidex).

#### Modalités de rattrapage

The evaluations will be organized by the professor in agreement with the student.

#### Documentation

- McCullagh, P., and Nelder, J.A., Generalized Linear Models (2nd edition). Chapman and Hall, 1989.
- Dobson, A.J., and Barnett, A.G., An Introduction to Generalized Linear Models (4th edition). Chapman and Hall, 2018.
- Faraway, J.J., Extending the Linear Model with R: Generalized Linear, Mixed Effects and Nonparametric Regression Models (2nd edition). Chapman and Hall, 2016.

#### Pré-requis

Linear regression models, Inferential statistics and knowledge of R.

#### Forme de l'enseignement

- 3 ECTS credits
- Compulsory course for master in statistics
- Spring semester