

## Faculty of Psychology and Education Sciences



### PSY2031 Introduction to multivariate methods in psychology

[30h] 3 credits

This course is taught in the 1st semester

**Teacher(s):** Guy Lories, Guy Lories (supplée Léopold Simar), Léopold Simar  
**Language:** French  
**Level:** Second cycle

#### Aims

- to develop some control of the most classical multivariate tools by showing the similarities and the differences between these approaches
- to introduce the minimum of mathematical elements required to complete the students formation

#### Main themes

ACP, factor analysis, multiple linear regressions, cluster analysis, structural equations models

#### Content and teaching methods

- to develop some control of the most classical multivariate tools by showing the similarities and the differences between these approaches
- to introduce the minimum of mathematical elements required to complete the students formation

At the end of the course the students should be able to implement with actual data the most classical tools to treat multidimensional data. The course will thus be centred on a good understanding of the methods and of their use, including the control of an appropriate software.

Content : introduction to multivariate methods, bitmap notations and basic properties of stochastic vectors, multiple and descriptive tools, classification, regression models, including ANOVA and ANCOVA, discriminant analysis.

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

The teaching includes practical work with treatment of actual data.

#### Other credits in programs

<b>MD3DA/MO</b>	Diplôme d'études approfondies en sciences de la santé (sciences de la motricité)	(3 credits)	Mandatory
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