Faculty of Economic, Social and Political Sciences

DEMO3415   Elementary mathematics applied to demography and social sciences

[10h] 2 credits

This course is taught in the 1st semester

Teacher(s):   Eric Vilquin
Language: French
Level: Third cycle

Aims

To familiarise students with the basic notions of mathematics applied to social sciences, and to demography in particular.

Main themes

- A study of the functions, and particularly of their derivatives and integrals.
- An introduction to matrix calculus (i.e. addition, multiplication, inversion, and the calculation of own values and own vectors).
In the case of each notion, to stress its (geometrical or other) interpretation and application in the field of demographics.

Content and teaching methods

Basic theoretical reviews of polynomial, logarithmic and exponential functions.
An introduction to matrix calculus.
Reading of the manual is compulsory.

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

Assessment: Written text of knowledge.

Other credits in programs

DEMO3DS   Diplôme d'études spécialisées en populations et sociétés   (2 credits)   Mandatory