



# Faculté des sciences économiques, sociales et politiques

## ESPO

DEMO3426 **Demographic analysis (mortality, fertility, migration and structures)**

[45h] 6 credits

**Teacher(s):** Josianne Duchene  
**Language:** french  
**Level:** 3rd cycle course

### Aims

To give training in demographic analysis, and to enable students to understand, and correctly apply, the classic methods of analysing population structures and various demographic phenomena.

### Main themes

- Basic concepts.
- The temporal identification of events and complements (periods and moments of observation, age-bands, generations, cohorts, graphical representations, and particularly, reliance on the lexis diagram).
- An analysis of birth rates and fertility (e.g. transversal analysis, longitudinal analysis, fertility rates, average age for child-bearing fertility at all levels and by level, the likelihood of enlargement, and retrospective analysis).
- An analysis of nuptiality (e.g. unions, marriages, divorces, and widow(er)hood).
- An analysis of mortality (e.g. child, youth and adult; all causes of death and death by cause; a table of mortality; and standardisation).
- The identification of space, and an analysis of internal migrations (measuring the intensity and the timetable).
- A simultaneous analysis of several (concurrent and disruptive) events.
- Structures of populations including by age and gender (pyramid), by matrimonial status, age and gender (matrimonial market), and the ratio of men.

### Content and teaching methods

#### Methodology

Illustration through examples, but limiting developments to what is necessary for an understanding of the approach (a discrete approach, rather than a continuous one).

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

Pre-requirement (or equivalent): Courses SPED 3245 ("Elementary statistics applied to demography and social sciences") and DEMO 3415 ("Elementary mathematics applied to demography and social sciences").

Assessment: Written examinations, possibly accompanied by continuous assessment.

### Other credits in programs

<b>DEMO3DA</b>	Diplôme d'études approfondies en démographie	(6 credits)	Mandatory
<b>DEMO3DS</b>	Diplôme d'études spécialisées en populations et sociétés	(6 credits)	Mandatory