

## Faculty of Economic, Social and Political Sciences



### DVLP3181 Introduction to the techniques of observation, analysis and modelling in relation to development

[15h+15h exercises] 2.5 credits

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

#### Aims

To introduce students to the basic techniques used in calculating the socio-economic indicators or development; these indicators have been analysed in other DES courses at the level of their interrelations and of their doctrinal and theoretical interpretations.

#### Main themes

A presentation of methods of calculating the following indicators:

- levels-structure analysis;
- movements (shift and share analysis);
- indices of concentration and specialisation, and the notion of entropy (applications include international trade and production);
- indices of dispersal and concentration (application at a spatial level);
- indices of income distribution (quartiles, Lorenz Curve, Gini, Atkinson, Theil, the coefficient of variation, a standard deviation in logarithms and the sensitivity of indices (Champernowne));
- indices of poverty (e.g. poverty line, poverty threshold and poverty fracture);
- indices of human development;
- matrix of social accountability.

#### Content and teaching methods

The lectures will be reduced to a minimum to give as much time as possible to enabling the students themselves to understand the calculation formulas and their application in practice.

Use of a spreadsheet (e.g. Excel).

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

Assessment: A written examination based on exercises already completed, and also containing the content of Course SPED 3245.

Pre-requirement: This course is preceded by Course SPED 3245 for DES development studies students.

For other students, a course in descriptive statistics must be taken prior to enrolling on this course.

#### Other credits in programs

<b>DVLP3DS</b>	Diplôme d'études spécialisées en études du développement	(2.5 credits)	Mandatory
<b>DVLP3DS/AD</b>	Diplôme d'études spécialisées en études du développement (Analyse du développement)	(2.5 credits)	Mandatory
<b>DVLP3DS/PR</b>	Diplôme d'études spécialisées en études du développement (Programme et projets de développement)	(2.5 credits)	Mandatory