LESPO2102

2015-2016

Statistics

4.0 credits	30.0 h + 15.0 h	1q

Teacher(s) :	Deprins Dominique ;
Language :	Français
Place of the course	Louvain-la-Neuve
Aims :	This statistics courses has two complementary teaching objectives: - to provide a rigorous, logical understanding of descriptive statistics and the statistical inference applicable in the field of economic and social sciences; - to facilitate an intelligent operational use of these same methods (i.e. more specifically, an understanding of how to choose a tool that has been adapted to the problem and to available data, to be able to operate it correctly, and to be able to interpret the results and their limitations). *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Content :	1. Introduction: The logical framework of reference 2. The statistical table and the graphical representation of diagrams 2.1. Raw data 2.2. A graphical representation of the distribution of a qualitative character 2.3 A graphical representation of the distribution of a continuous, or implicitly continuous, character: the histogram and the cumulative curve 2.4. A graphical representation of the distribution of a discrete quantitative character 3. The parameters of the central tendency and of dispersal 3.1. The arithmetical average 3.2. Other position parameters (mode, median and quantiles) 3.3. Variation and standard deviation 3.4. Other parameters of dispersal (absolute mean deviation and interquartile range) 4. Basic mathematical models 4.1. Discrete random variables; the Bernoulli process (binominal distribution) 4.2. Continuing random variables; the Gauss-Laplace process (normal distribution) 5. Statistical inference 5.1. Sampling 5.2. Estimate of an average and a proportion 5.3. Confidence belts (averages and proportions) 5.4. A hypothesis test on an average and a proportion 5.5. Comparison of two averages and two proportions
Faculty or entity in charge:	ESPO

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Labour sciences (shift schedule)	TRAV2M	4	-	