Master of Public Health - Semester 1 Minor A ISB Minor 214: Multidimensional and Multivariate Statistical Methods

Coordinator: Prof. Séverine DEGUEN, EHESP

Location: Cap-Digital's room, EHESP Campus 20 Avenue George Sand, La Plaine St Denis

Monday 4 November	Tuesday 5 November	Wednesday 6 November	Thursday 7 November	Friday 8 November
9:00– 11:00 (<i>Lecture</i>) Introduction to the module Multivariate Poisson regression Over dispersion Séverine Deguen - EHESP	9:00– 11:00 (<i>Lecture</i>) Multivariate negative binomial regression	9:00 – 10:00 (<i>Lecture</i>) Overall introduction to multidimensional methods for quantitative, qualitative and both qualitative and quantitative variables	9:00– 10:30 (<i>Lecture</i>) Cluster analysis: general principle, dendogram representation and interpretation, main characteristics of classes	9:00 – 10:30 (Conf') 'Neighborhoods' using zone design algorithms to explore relationships between asthma and deprivation in Strasbourg, France' Wahida Kihal
Cevenine Deguen - Encor	Séverine Deguen	Séverine Deguen	Séverine Deguen	
11 :00 – 12 :00 (<i>exercices</i>) Interpreting the results Séverine Deguen & Cindy Padilla -EHESP	11:00– 12:00 (Conf') 'Use of geographic indicators of healthcare, environment and socioeconomic factors to characterize environmental health disparities' Cindy Padilla	10:00 – 12:00 (<i>Lecture</i>) Focus on quantitative variables : Principal Component Analysis Collinearity in regression model Séverine Deguen	10:30– 12:00 (Conf') 'Synthetic homogeneous 'A statistical procedure to create a neighborhood socioeconomic index for health inequalities analysis.' Benoit Lalloué	10:30-12:00 (Conf') 'Perception of the air quality in Lyon metropolitaen area Séverine Deguen
12:00 Lunch	12:00 Lunch	12:00 Lunch	12:00 Lunch	12:00 Lunch
1:00 – 4:00 Computer lab – STATA Multivariate regression Séverine Deguen & Cindy Padilla	1:00 – 4:00 Computer lab – STATA Multivariate regression Séverine Deguen & Cindy Padilla	1:00 – 2:30 (<i>exercices</i>) Interpreting the results of a PCA 2:30 – 5:00 Computer lab – STATA PCA analysis	 1:00 – 2:30: (exercices) Interpreting the results of a cluster analysis 2:30 – 4:00 Computer lab – STATA Cluster analysis 	1:00 – 4:00 Computer lab – STATA Regression and PCA Séverine Deguen & Wahida Kihal
	4:00 – 5:00 Optional session – Homework 1 Séverine Deguen	Séverine Deguen & Wahida Kihal - CNRS	4:00 – 5:00 Optional session – Homework 2 Séverine Deguen & Wahida Kihal	