UCLouvain

lbio1383

2020

## Statistical methods applied to biology

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

Teacher(s)	El Ghouch Anouar ;			
Language :	French			
Place of the course	Louvain-la-Neuve			
Prerequisites	The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.			
Main themes	his course discusses advanced statistical inference methods for the analysis of biological data: generalized linear models. The analysis of variance and simple linear regression models (LBIO1283) will be extended to models including (1) multiple explanatory variables, (2) continuous and discrete explanatory variables, (3) fixed and random explanatory variables, and (4) response variables with non-normal distributions.  The practical work will allow a practical implementation using the R software.			
Aims	By the end of this course, students will be able to implement the analysis of complex data sets using linear models and to interpret the results with an awareness of the possible limitations to inference posed by the data and/or compliance with the conditions of statistical analysis.  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".			
Faculty or entity in charge	BIOL			

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Aims	
Bachelor in Biology	BIOL1BA	5	LMAT1101 AND LMAT1102 AND LBIO1282 AND LBIO1283	<b>Q</b>	