UCLouvain

Ibio1383

2021

Statistical methods applied to biology

5.00 credits	30.0 h + 40.0 h	Q2	
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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.		
Learning outcomes	At the end of this learning unit, the student is able to: 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.		
Faculty or entity in charge	BIOL		

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Biology	BIOL1BA	5	LMAT1101 AND LMAT1102 AND LBIO1282 AND LBIO1283	Q		