



## REFERENCE BOOKS

Numerical ecology. Legendre, Legendre, 2012. 3rd English edition. Elsevier.  
Numerical ecology with R. Borcard, Gillet, Legendre, 2011. Springer  
An Introduction to Applied Multivariate Analysis with R. Everitt, Hothorn, 2011. Springer.  
Analyses factorielles simples et multiples. Escoffier, Pagès, 1998. Dunod.  
Statistique exploratoire multidimensionnelle. Lebart, Morineau, Piron, 1997. Dunod.

## ACQUIRED KNOWLEDGE

Programming in R  
Using of specialised statistical software  
Choosing multivariate analysis methods according to the question of interest  
Actually using multivariate analysis methods and interpreting results  
Conducting a complete analysis of a dataset

## PRACTICAL INFORMATION

This module can, in general, be accepted as a PhD class, sanctioned by an exam. At the very least, a certificate of participation can be issued.

The module is open to French and foreign students in a Master or PhD degree, assuming the prerequisites mentioned above are known. If foreign students register, the courses will be given in English.

Registration is open from January 29 to March 20, 2018.

The registration form ([to download\\*](#)), a CV and a letter of intent should be sent to [ame2@obs-vlfr.fr](mailto:ame2@obs-vlfr.fr) before the registration deadline. Registration is free for Sorbonne Université students, costs 50€ for other students and 900€ for non-students applicants.

The marine station of Villefranche offers accommodation and catering options, detailed [on the IMEV \(ex OOV\)\\*](#) website.

Students are expected on Saturday, July 7 or Sunday, July 8, 2018. Classes begin Monday, July 9 at 9 am and end Friday, July 27, 2018 at noon.

\* [http://oov.obs-vlfr.fr/fr/l\\_enseignement/stages\\_interuniversitaires\\_d\\_ete.html](http://oov.obs-vlfr.fr/fr/l_enseignement/stages_interuniversitaires_d_ete.html)