

LBOE2124

2016-2017

Molecular ecology

8.0 credits	36.0 h + 56.0 h	2q

Teacher(s):	Van Doninck Karine ; Nieberding Caroline ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Prerequisites :	A basic knowledge of population genetics
Main themes :	The methods for data acquisition and analysis used in behavioral ecology, population and conservation genetics, quantitative genetics, phylogeny and phylogeography will be explained and illustrated by reading recent articles. Some invited speakers will share their research results in those fields. During the practical work, the student will perform DNA extractions, PCR, visualisation on agarose gels, microsatellite genotyping and DNA sequencing. The molecular markers used are RFLP/AFLP, microsatellites and DNA sequences. Students will analyse their sequence and genotype data using a variety of specific statistical methods.
Aims:	The course aims to give an overview of molecular methods currently used in ecological and evolutionary research, including hands- on experience for a number of techniques that are often used. The students will learn which methods can be applied and what type of results can be obtained for different study objectives. They will be able to compare these methods and give advantages and disadvantages. They will have sufficient experience with the laboratory techniques and the analysis of genetic data to start a research project in one of the research fields mentioned. 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".
Other infos :	Support : Lecture notes, scientific articles
Faculty or entity in charge:	BIOL

Programmes / formations proposant cette unité d'enseignement (UE)						
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage		
Master [120] in Biology of Organisms and Ecology	BOE2M	8		•		
Master [60] in Biology	BIOL2M1	5	-	Q		