

3.00 credits

30.0 h + 10.0 h

Q2

Teacher(s)	Mahy Grégory ;
Language :	English > French-friendly
Place of the course	Louvain-la-Neuve
Prerequisites	To follow this course, it is necessary to master the knowledge and skills developed in the course LBIO1117 (Ecology I)
Main themes	The course develops the processes that govern the structuring of ecological systems at different levels of organisation: populations, communities, ecosystems. The basics of quantifying ecological processes are developed in relation to biodiversity conservation issues: species conservation, specific diversity and ecological restoration, ecosystem services.
Learning outcomes	At the end of this learning unit, the student is able to : Explain the fundamental principles of ecology, including interactions between organisms and their environment, population dynamics, and community structure. ¹ Identify the main variables of an ecological system in order to develop a relevant quantitative analysis of the relationships between the elements of the biocoenosis and the biotope.
Evaluation methods	Written examination with definitions and open-ended questions requiring restitution and reflection. Practical work report.
Teaching methods	Lectures Practical work on the characterisation of plant communities.
Content	ECOLOGICAL NICHE: Species conservation and bioindicators POPULATIONS: Quantifying the structure and spatio-temporal dynamics of species populations, demographic strategies. INTERACTIONS BETWEEN SPECIES: Diversity of interspecific interactions and their role in population regulation. COMMUNITIES: Understanding species assemblages, quantifying their specific diversity, understanding the functional composition of communities. ECOSYSTEMS: Understanding the links between the specific and functional composition of communities and ecosystem functions.
Faculty or entity in charge	BIOL

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Minor in Scientific Culture	MINCULTS	3		
Bachelor in Biology	BIOL1BA	3		
Interdisciplinary Advanced Master in Science and Management of the Environment and Sustainable Development	ENVI2MC	3		
Master [120] in Geography : General	GEOG2M	3		
Bachelor in Biology, Anthropology and Archaeology	BABA1BA	3		
Master [120] of Education, Section 4 : Geography	GEOG2M4	3		