




4 credits

24.0 h + 24.0 h

Q1

Teacher(s)	Van Dyck Hans ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	1) Definition and history of landscape ecology 2) Structural components of landscapes: spatial analysis 3) Habitat fragmentation: patterns and consequences 4) Movements by organisms: Structural versus functional connectivity of landscapes 5) Landscape ecology and conservation: ecological networks, corridors and de-fragmentation measures 6) Use of spatial software tools (GIS-applications) 7) Practical applications: bridging the gap between ecological science and policy making/landscape management
Aims	<p>Landscape ecology addresses how to describe and quantify - and in particular how to understand - ecosystems at the landscape level by analyzing biotic, abiotic and human factors. In this course we particularly focus on the ecological functioning of landscapes within the frame of habitat fragmentation and the mobility of organisms. Students need to know the key concepts of landscape ecology and need to understand in particular the difference between structural and functional landscape connectivity (in whatever application). Students should be familiar with the research methods used (empirical and modeling work). They should also be aware of the potential communication problems between ecologists and non-ecologists in practical multi-disciplinary projects.</p> <p>-----</p> <p><i>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".</i></p>
Other infos	LGEO1342A course or prior knowledge of a geographical information system (GIS / GIS, eg ArcGIS) is necessary to follow this course
Faculty or entity in charge	BIOL

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Forests and Natural Areas Engineering	BIRF2M	4		
Master [60] in Biology	BIOL2M1	4		
Master [120] in Biology of Organisms and Ecology	BOE2M	4		
Master [120] in Geography : General	GEOG2M	4		