





2 credits

24.0 h

Q1

Teacher(s)	Hance Thierry ; Jacquemart Anne-Laure ; Louapre Philippe (compensates Hance Thierry) ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Lectures in class room in three modules: 1) Plant life history traits, 2) Population dynamics, 3) Basics of evolutionary ecology, and particularly, behavioural ecology. During our lectures we use PowerPoint presentations, but also videos.
Aims	<p>Interactions between living organisms determine the dynamic and the structure of living communities. Moreover, they play an essential role in evolutionary process. In terms of knowledge, students will have to understand the principles underlying the modelling of individual interaction. Moreover, they will have to know the theories on coexistence, competition, herbivory, predation, parasitism and coevolution. At the end of the course they should be able to applied their knowledge to new situations.</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>
Content	The diversity of interactions in animal and plant kingdoms is discussed. Following an overview of this diversity, we focus on some types of interactions and their adaptive and evolutionary significance: symbiosis, plant defenses against herbivory, competition, predation. Both theoretical models including optimal foraging theory, and applications are included. Theoretical courses using diverse didactic supports (videos, PowerPoint). The focus is made on the elaboration and follow-up of experimental designs (with a personal critical analysis of one scientific paper on species coexistence including its oral presentation and a join common discussion on planning a competition experiment).
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	2		
Master [120] in Agricultural Bioengineering	BIRA2M	2		
Master [60] in Biology	BIOL2M1	2		
Master [120] in Biology of Organisms and Ecology	BOE2M	2		
Master [120] in Geography : General	GEOG2M	2		