UCLouvain

lboe2111

2019

Evolution

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

5 credits	54.0 h	Q1

Teacher(s)	Dehoux Jean-Paul ;Hance Thierry ;Nieberding Caroline (coordinator) ;Rezsohazy René ;Van Doninck Karine ;Visser Bertanne (compensates Nieberding Caroline) ;Wesselingh Renate ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	The course consists of two major parts, dealing with macroevolution and microevolution, respectively. The first part will deal with the appearance of life, the evolution of reproductive systems, autotrophy/heterotrophy, organel formation, endosymbiosis, the main innovations in plant and animal evolution and the origin of man and cultural evolution. The major scientific theories (catastrophism, darwinism, neodarwinism, synthetic theory, neutralism, selfish gene, punctuated equilibrium, complexity and chaos) wil be explained and discussed. The second part deals with selection, adaptation and evolution on shorter time scales, and will discuss various subjects, such as genetic vatiation, heritability, natural and sexual selection, kin selection, evolution of sociality, game theory, life history theory, mating systems, aging and senescence.
Aims	1 Evolution is a constantly changing field due to the variety of sometimes contradictory theories. Students will acquire the basic knowledge needed to understand the main theories. They should be able to discuss these theories, to formulate hypotheses, discuss them and to make a synthesis. During a public seminar they will present and discuss an aspect of evolution from different points of view. Articles on microevolution will be discussed in class, and students will learn how to critically read an article. - - - - *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".*
Faculty or entity in charge	BIOL

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [60] in Biology	BIOL2M1	5		🔍
Master [120] in Biology of Organisms and Ecology	BOE2M	5		🔍