UCLouvain

lbres2106a

2019

Integrated management of the soil-plant system (partim)

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.

4 credits	29.0 h + 7.0 h	Q2

Teacher(s)	Declerck Stephan ;Draye Xavier (coordinator) ;Lobet Guillaume ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	· Soil-plant interactions : functioning of cultivated soils, determinants of soil fertility, dynamics of soil exploration by root systems, rhizospheric processes · Biogeochemical cyles and processes : action of soil organisms (plants and animals) on the nutrient cycles, ecological requirements and biogeochemical action of organisms, soil degradation, modifications of biological properties - Fertiliser science : estimation of crop demand, use of mineral and organic fertilisers, recent technological advances
Aims	*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".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The evaluation of students is done by a written exam.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** The teaching is based on a theoretical course.
Content	The course is divided into three main parts: Part 1: description of the main soil organisms (functions, impacts, problems of agro-ecosystems and use). Part 2: Mycorrhizal symbiosis (types of mycorrhizae, notions of mycorrhizal roots, mycelial networks, agro-environmental significance). Part 3: biogeochemical cycles (N, P, K, S, C) - forms available to plants, functions, symptoms of deficiency and excess, global cycle.
Inline resources	Moodle
Bibliography	**S** upport(s) de cours obligatoires Diapositives du cours en ligne sur Moodle
Other infos	This course can be given in English.
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Agricultural Bioengineering	BIRA2M	4		