lbrpp2207

2019

Epidemiology and warning systems in plant pathology

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.

3 credits	30.0 h	Q2

Teacher(s)	Legrève Anne ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	LBIRA2106 *The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.*
Main themes	Introduction to epidemiology, measuring plant diseases, comparative epidemiology, introduction to modelling, temporal analysis of epidemics, spatial aspects of epidemics, plant disease forecasting systems. Content: The elements of an epidemics, methodology for assessing plant disease progression and the economical effects, measure and influence of meteorological factors, modelling plant disease epidemics, case studies and presentation of predicting models or warning systems.
Aims	a. Contribution of the activity to the LO (LO from the program) 1.1 and 1.5 ; 2.1 to 2.4 ; 3.1 to 3.8 ; 4.1 to 4.5 and 4.7 ; 5.3 and 5.4 ; 6.1 to 6.9 ; 7.1 to 7.3 ; 8.1 to 8.6 b. LO from the program specific to this activity 1 By the end of the cursus, each student is trained to analyse the epidemiology of plant diseases and should be able to - identify major environmental factors affecting plant disease epidemics; - understand the conception of integrated systems for data collection and decision tool in plant pathology; - perform a critical analysis of forecasting systems; - develop and design innovative epidemiologic models and forecasting systems. - - - - *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.** Project (development of an epidemiologic model and design of a predictive system) prepared by the student under the supervision of the teacher.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Lectures and practical work
Inline resources	Syllabus and/or slides available on Moodle
Bibliography	Diapos disponibles via moodle. Ouvrages de référence dans le domaine de l'épidémiologie des maladies des plantes.
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	3	LBIRA2106 OR LBRPP2103	