LBRPP2207

2015-2016

Epidemiology and warning systems in plant pathology

3.0 credits	30.0 h	2q

Teacher(s) :	Legrève Anne ;
Language :	Français
Place of the course	Louvain-la-Neuve
Inline resources:	Syllabus and/or slides available on icampus
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 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 :	Project (development of an epidemiologic model and design of a predictive system) prepared by the student under the supervision of the teacher.
Teaching methods :	Lectures and practical work
Bibliography :	Slides available on i-campus, reference book: 'The Study of plant disease epidemics' by Madden et al., 2007, APS Press
Faculty or entity in charge:	AGRO

Programmes / formations proposant cette unité d'enseignement (UE)

Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Agricultural Bioengineering	BIRA2M	3	LBIRA2106 **or** LBRPP2103	🔍