UCL Université catholique de Louvain

LBRAI2103

2010-2011

Rural sociology and land use

3.0 credits	30.0 h	2q

Teacher(s) :	Bertin Pierre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Analysis of the ecological and agronomical specificity of the intertropical and subtropical environment. Analysis of the physiological and ecophysiological aspects of the cultures: water relationships, thermal and nutritional aspects, photoperiodism. Phenological study: growth and development of model plants (including their development cycle), growth and development of harvested organs. Critical study and evaluation of cultural practices as a function of all above-mentioned criteria.
Aims :	Analysis of the specificity of tropical and subtropical regions and constraints to the agricultural production (climate, soil, economy). Analysis of the diversity of productions as a result of the biological, environmental and genetic aspects of the culture. Evaluation of the accuracy of production systems as a function of environmental ans socio-economical constraints and production objectives. *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".*
Content :	Content and methods: practical approach based on the analysis of interactive documents, videos, personal experiences of teacher and students, followed by theoretical courses aiming to synthesize the acquired knowledge. Environmental aspects in tropical regions: climatology, soil science, phytogeography and consequences for the production. Ecophysiology in tropical environment: water regime, photoperiod, phenology, mineral nutrition, consequences on the cultural practices. Diversity of cultures: imrpvement of study of several cultures constituting a large panel of ecological and cultural aspects (vegetative cycle, harvested organs): cereals (maize, sorghum, pearl millet), annual legumes: (peanut, soybean, common bean), tuber crops (yams, sweet potato), perennial crop cultivated as annuals (cassava, cotton), perennial crops (harvested organ: leaves: tee; fruit: bananas, coffee tree, cacao; rubber: hevea).
Other infos :	Pre-requisite: courses of plant biology, plant physiology, plant production, phytiatry and genetics of the first three years of the Bioengineer program or equivalent Evaluation: oral Support: syllabus, video documents, PowerPoint slides, internet sites, reference books
Cycle and year of study :	> Master [120] in Agricultural Bioengineering > Master [120] in Forests and Natural Areas Engineering
Faculty or entity in charge:	AGRO