lbrai2217

2017

UCLouvain

3 credits	22.5 h + 15.0 h	Q2

Teacher(s)	Froidmont Eric ;Lambert Richard ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	-Importance of grassland (usable agricultural surface, economics, N and C cycles, soil protection, biodiversity') -Historical account and evolution -Study of the species -Methods of inventory -Ecology, conservation, restoration -Physiology of grass growth in relation to primary production and quality -Phytotechnics and grazing management -Association grasses-legumes - Agro-environmental measures
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	Description, analysis and critical analysis of the grassland system management and functioning is performed by the student on the bassis of knowledge acquired during the instruction. Oral exam subsequent to a writing session aiming at assessing theoretical knowledge, followed be a session dedicated to the (i) recognition of major grasses and legumes and (ii) discussion of their ecology.
Teaching methods	A selection of documents available on iCampus Dropbox, supplemented by lectures. Visits of grassland farms, 'natural' meadows are used to illustrate theoretical knowledge and compare contrasting viewpoints from farmers, managers of natural areas and conservation scientists. A collection of grassland species, installed at the farm Marbaix is used for learning of recognition techniques of diverse grasses. Botanical surveys are also carried out in meadows and these will be used to diagnose management techniques and environmental conditions.
Content	The course is based on the analysis of the importance of grasslands and rangelands in relation to economical and environmental considerations (e.g., multifunctionality of grasslands). It presents the history and development of grasslands in the context of a constantly changing agriculture. Selected species are studied on the basis of their systematics, morphology, ecology and their interaction in a cover in response to management and environmental conditions. A focus is made on grass-legume mixtures and the emphasis is also placed on grassland management (pasture types, methods of harvesting and conservation) as well as on nutritional/qualitative attributes that strongly influence animal performance. Aspects related to conservation and restoration of biodiversity, water quality, soil protection, carbon storage are also presented. Visits and field sessions are offered in order to practice inventory techniques. Analytical reports will be requested to address options for improving environmental and economical performance of grassland systems.
Inline resources	Moodle
Bibliography	L. Vigneau-Loustau & C. Huyghe, 2008. Stratégies fourragères. Ed France Agricole Peeters A, Wild and sown grasses. Philippe A et al., 2008. Prairies traditionnelles d'Ardenne. Collection Agrinature n°2 Van Gelderen et al., Rencontre au coeur des prairies de haute valeur biologique. Collection Agrinature n°7 Deprez B et al., 2007. Les prairies temporaires : une culture durable pour les exploitations mixtes de la Moyenne Belgique. Les dossiers de la recherche. Knoden et al., 2007. Fertilisation raisonnée des prairies. Les livrets de l'Agriculture.
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		🔍