UCLouvain

## lbirf2202

2019

## Multifunctional forest management

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.

Teacher(s)	Ponette Quentin;					
Language :	French					
Place of the course	Louvain-la-Neuve					
Prerequisites	Prerequisites: geomatics, ecology, silviculture, forest mensuration, forest economics, forest operations an harvesting, management of habitats and species.  Supplementary courses: environmental law, land planning.  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	1. Main concepts:  - basic concepts of forest management: time, space, optimal felling ages/dimensions, normal forests, annual allowable cut;  - steps in forest management: analysis, synthesis, implementation, follow-up/monitoring;  - specification of forest management based on the type of society (forest, agricultural, industrial, post-industrial);  - key management methods in temperate zones: uniform systems, selection system, irregular stands, conversion and transformation;  - taking into account the production of social and environmental services (biodiversity, landscape, public hosting,);  The concepts related to the management of temperate forests are implemented in the companion course entitled 'Integrated project in forest planning' LBIRF2212.					
Aims	a. Contribution de l'activité au référentiel AA (AA du programme)  M1.1, M1.2, M1.4, M1.5, M2.1, M2.2, M2.4, M6.1, M6.2, M6.4, M6.9, M8.5  b. Formulation spécifique pour cette activité des AA du programme (maximum 10)  At the end of the course, students will have acquired the skills to:  - master the concepts and methods involved in the different steps associated with the planning process of forests located in temperate and tropical regions - analysis, synthesis, implementation, follow-up;  - select, analyze and synthesize data from diverse disciplines such as resource assessment, management, analysis of social and environmental impacts, etc.;  - establish management plans at the forest ownership scale, integrating the constraints, risks and opportunities from various fields and stakeholders;  - develop sound management decisions for tropical ecosystems, based on a deep understanding of their ecology and issues associated with them.  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.  - written examination;  - evaluation of the presentations given by the students.					
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change.  - lectures including practical examples, case studies and active learning mini-activities;  - seminars by stakeholders from the socio-professional and scientific spheres;  - presentations by teams of students of a forest management case study, with discussions and feedback;  - supervised analysis of a management plan of a public forest;  - delineation of forest stands and parcels.					
Content	Table of contents - context					

## Université catholique de Louvain - Multifunctional forest management - en-cours-2019-lbirf2202

Faculty or entity in charge	AGRO				
Other infos	This course can be given in English.				
	<ul> <li>- Dubourdieu, J. 1997. Manuel d'aménagement forestier. Gestion durable et intégrée des écosystèmes forestiers Lavoisier Tec&amp;Doc, Paris, France, 243 p.</li> </ul>				
	- de Turckheim, B., Bruciamacchie, M. 2005. La futaie irrégulière. Théorie et pratique de la sylviculture irrégulière continue et proche de la nature. Edisud, Aix-en-Provence, France, 286 p.				
	Pour en savoir plus, l'étudiant pourra consulter utilement les ouvrages de référence suivants :				
Bibliography	Les supports de cours obligatoires (diapositives power point, documents de référence) sont mis à disposition de l'étudiant sur Moodle.				
Inline resources	Moodle				
	- multifunctional role of forests: historical context; legal context; institutional context; history of management methods				
	- stand conversion and transformation				
	- management of irregular / unevenaged forests: particularities; normal forest; allowable cuts; follow-up and control; conditions of application				
	<ul> <li>management of evenaged forests: normal forest; regeneration cuttings and regeneration effort; groups; allowable cuts</li> </ul>				
	- silvicultural systems, silvicultural treatments et optimal felling age/dimension: general approach; classification of silvicultural treatments and management methods; determination of optimal felling ages and dimensions				
	- main management concepts: space-related concepts; time-related concepts; other concepts				
	- management steps: analysis; synthesis; implementation; follow-up/monitoring				

Programmes containing this learning unit (UE)							
Program title	Acronym	Credits	Prerequisite	Aims			
Master [120] in Forests and Natural Areas Engineering	BIRF2M	3	LBIRE2102 AND LBIRE2104 AND LBIRF2101 AND LBIRF2105 AND LBIRF2201 AND LBIRF2104	Q			