

3 credits

37.5 h

Q1

Teacher(s)	Farcy Christine ;Herman Marc ;Jonard Mathieu coordinator ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	<ul style="list-style-type: none"> - Valuation of forest based on net present value concept knowing the timing of expenditures and revenues - Optimization of forest management based on profitability criteria (including the internal rate of return) - Formation of timber prices on the market - Estimation of the value of non-market forest goods and services - Elaboration of forest policy - Main legislative and institutional instruments implemented in Wallonia - Analysis of some components of the forest international regime, at European, Paneuropean and global level
Aims	<p>a. <u>Contribution de l'activité au référentiel AA (AA du programme)</u> 2.1 2.2 2.4 2.5 5.1 5.4 5.5 5.6 6.2 6.5 6.6 6.7</p> <p>b. <u>Formulation spécifique pour cette activité des AA du programme (maximum 10)</u> At the end of this course, the student should be able to :</p> <ul style="list-style-type: none"> - Identify the main actors in forest economics (wood industry) and explain their respective interdependence and their regional and international role ; - Calculate the market value of a tree or a stand according to various methods ; - Calculate the net present value of a tree plantation based on the timing of expenditures and revenues ; - Briefly describe several methods for assessing non-market values "of forests and propose a practical implementation in a particular case ; - Compare the profitability of different management scenarios (or investments) using appropriate criteria depending on the objectives assigned to the forest; 1 - Specify how the tax and legal constraints affect the profitability of forestry investments and mention the uncertainties potentially affecting this profitability; - Estimate the value of a forest ownership or the indemnity associated to a damage caused to the forest based on a brief description of it, write a report justifying how the value was obtained, orally present and defend the report ; - Contribute to formulation of relevant forest policies in order to answer to social demands for forest good and services; - Understand the functioning of the international forest regime and of international strategies related to conservation and use of natural resources and be able to interpret factors influencing forest policies; - Position his/her activity as future manager of natural patrimony in the legislative and institutional framework of Wallonia and the international forest regime; - Summarize and present main legislative and institutional instruments implemented in Wallonia in the framework of forest policy; - Exercise critical thinking in order to identify strengths, weaknesses, threats and opportunities associated with these different instruments. <p>----- <i>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".</i></p>
Evaluation methods	<p>Regarding forest economics, students are evaluated on:</p> <ul style="list-style-type: none"> (i) involvement in the course (solving small exercises, interactions with the professor and external stakeholders) (ii) an expert report for assessing the value of a forest ownership and the oral presentation thereof, (iii) a written examination (theoretical questions + problem solving). <p>For the "Forest Policy" part, the evaluation is done on the sole basis of a written work of about ten pages on a chosen topical issue. This work is submitted before the exam session. The evaluation focuses on the quality of reasoning (no expected completeness). An oral presentation is possible.</p> <p>The final score of the exam is calculated based on weighted mean of the scores of both parts (in proportion to the numbers of hours).</p>

Teaching methods	<p>The lectures are interspersed with small exercises or issues involving the notions previously presented in the course. In addition, students are encouraged to interact with the professors and with external stakeholders.</p> <p>Regarding forest economics, students have to carry out a project by group and to make a report and an oral presentation. The objective is to put the students in a situation commonly encountered by foresters.</p> <p>For the "Forest Policy" part, a visit of the European Union bodies based in Brussels is planned, with meetings of experts and / or officials.</p>
Content	<p>1. Contents</p> <p>1.1 Forest Economics</p> <p>1.1.1 Forest goods and services</p> <p>1.1.2 Calculation of the net present value of a forest</p> <p>1.1.3 Optimization criteria of forest management</p> <p>1.1.4 Value of forest ownerships</p> <p>1.1.5 Timber market</p> <p>1.1.6 Accounting for the uncertainties in profitability calculation</p> <p>1.1.7 Impact of subsidies, taxation and legislative constraints on profitability</p> <p>1.1.8 Forest expertise</p> <p>1.1.9 Estimation of the non-market value of forests</p> <p>1.2 Forest Policy</p> <p>A common introduction addresses the main issues related to forest and forestry and presents the conceptual and methodological framework on which the course is based. The course then deepens, based on this framework, the actuality of the forest policy, in Wallonia on the one hand, and on the international scale (global level, pan-European and European Union), on the other hand.</p> <p>2. Complementary explanations (if needed)</p>
Bibliography	<ul style="list-style-type: none"> • Economie forestière : présentation ppt et syllabus mis à disposition dans Moodle • Politique forestière : supports disponibles dans Moodle <p>Pour ce qui est de l'économie forestière, les présentations ppt servant de support au cours magistral sont mises disposition des étudiants un jour ou deux avant le cours. De plus, l'enseignant fournit, à la fin du quadrimestre, un syllabus reprenant l'ensemble de la matière vue au cours.</p> <p>Pour la partie "Politique", les supports utiles au cours sont disponibles sur le site Moodle ; en particulier, les étudiants y trouveront le guide "Élaborer une politique forestière efficace" (Etude FAO Forêts n°161, 2010) qu'ils seront amenés à analyser.</p>
Other infos	<p>This course can be given in English.</p>
Faculty or entity in charge	<p>AGRO</p>

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Forests and Natural Areas Engineering	BIRF2M	3		