

3.0 credits

37.5 h

1q

Teacher(s) :	Herman Marc ; Farcy Christine ; Jonard Mathieu (coordinator) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Subjects / titles of prerequisite courses: Introduction to forest sciences
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. Contribution de l'activité au référentiel AA (AA du programme) 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. Formulation spécifique pour cette activité des AA du programme (maximum 10) 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; - 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>Regarding forest policy, students are evaluated through a written examination common to both parts (Wallonia and international). 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>Regarding forest policy, a visit to the European Commission is planned.</p>
Content :	<ul style="list-style-type: none"> 1. Contents 1.1 Forest Economics 1.1.1 Forest goods and services

	<p>1.1.2 Calculation of the net present value of a forest 1.1.3 Optimization criteria of forest management 1.1.4 Value of forest ownerships 1.1.5 Timber market 1.1.6 Accounting for the uncertainties in profitability calculation 1.1.7 Impact of subsidies, taxation and legislative constraints on profitability 1.1.8 Forest expertise 1.1.9 Estimation of the non-market value of forests 1.2 Forest Policy 1.2.1 Challenges related to forest and conceptual framework 1.2.2 Forest policy in Wallonia : public and private stakeholders of forest management and wood industry, forest law, forest inventory, PEFC certification, Walloon Economic Office of Wood, Support unit for Small Forest Ownership, Nature Conservation Law, Natura 2000, Hunting Law, Walloon Observatory of Forest Health 1.2.3 International forest policy : current initiatives at European level (EU), pan-European processes, global processes (United Nations Forum on Forests, FAO Committee on Forestry) 2. Complementary explanations (if needed)</p>
<p>Bibliography :</p>	<p>Regarding forest economics, the slides are provided several days before the lecture. In addition, a syllabus is made available to students at the end of the course. Regarding forest policy, slides will be available on iCampus. Students will also find there 'Developing effective forest policy - A guide' (FAO Forestry Paper, 161, 2010); they will have to analyze it.</p>
<p>Cycle and year of study :</p>	<p>> Master [120] in Forests and Natural Areas Engineering</p>
<p>Faculty or entity in charge:</p>	<p>AGRO</p>