

3.0 credits	30.0 h + 7.5 h	2q
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Teacher(s) :	Lutts Stanley (coordinator) ; Janssens Frédéric (compensates Jacquemart Anne-Laure) ; Jacquemart Anne-Laure ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<p>The 5 classical plant hormones, namely auxins, gibberellins, cytokinins, ethylene and abscissic acid, are studied in detail. The specific functions of other molecules involved in plant growth and development, but also in plant defence against biotic invaders, are viewed. The major role of photoperiodism in plant development is analysed in depth using the control of floral transition as an example. Basic concepts on photomorphogenesis and endogenous biological rhythms are overviewed as well as the biochemical and physiological basis of vernalization and bud dormancy. The mechanisms of resistance of plants to environmental constraints are schematically presented.</p> <p>Principles, methods and history of plant systematics (with a focus on angiosperms). Morphology and organisation of the vegetative (leaves, stems, roots) and generative (flowers, inflorescences and fruits) apparatus. Brief description of a selected choice of families and presentation in each case of a few typical species of interest for agriculture or horticulture (crops and weeds). New developments due to recent achievements in genetical and molecular analysis.</p> <p>Exercises of plant determination with a flora.</p>
Aims :	<p>To give students precise notions to apprehend the specificities of plant functioning and to master the complex problematics of processes governing growth, development and adaptation to the environment.</p> <p>To initiate students to methodologies used in physiology of the whole plant.</p> <p>To initiate students to the systematics of angiosperms and to the observations of morphological characters allowing plant determination.</p> <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>
Cycle and year of study :	> Bachelor in Bioengineering
Faculty or entity in charge:	AGRO