

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

5 credits	30.0 h + 30.0 h	Q2
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Teacher(s)	Draye Xavier (coordinator) ;Lutts Stanley ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	<i>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.</i>
Aims	<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>
Evaluation methods	<b>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</b> Written exam and evaluation of the group work (final presentation).
Teaching methods	<b>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</b> Ex-catherdra course with practicals in groups and in project mode.
Content	The water relations of the plant are detailed: notions of water potential and its components, water transport in the soil-plant-atmosphere continuum, stomatal regulation and the importance of water relations at the cell and tissue level. The bases of mineral nutrition are specified: interactions between the root system and the soil, notions and functions of essential elements, cellular and transcellular transport. The light phase of photosynthesis is described in relation to the structure of the photosynthetic apparatus. The dark phase is approached by integrating the problem of gas exchanges and the efficiency of water use. The transport of assimilates is detailed: loading and unloading of the phloem, distribution of assimilates according to source-well relationships.
Inline resources	Moodle: powerpoint slides, modelling exercices
Bibliography	Transparents des cours. Le cours suit assez fidèlement le livre (disponible en BST) Plant Physiology (Taiz and Zeiger).
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Bioengineering	BIR1BA	5	LBIR1150 AND LBIR1151 AND LCHM1141B	