UCLouvain

Ibio1242

2019

Angiosperm's development, reproduction and systematic

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.

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Teacher(s)	Lejeune André ;Lutts Stanley ;Quinet Muriel ;				
Language :	French				
Place of the course	Louvain-la-Neuve				
Prerequisites	Basic course in plant biology like LBIO1112T 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	This teaching unit focuses on plant reproduction and development. Concepts of floral organography and plant systematics are addressed with the aim of introducing the student to the practical use of a flora and the identification of the main plants of our regions.				
Aims	1 Know and understand the structure, the maintenance and the functioning of the shoot apical meristem				
	2 Know and understand the main aspects of floral biology and plant reproduction				
	3 Identify plants through the use of flora and the creation of a herbarium				
	4 Acquire a methodical analytical attitude: observe, describe, use the correct vocabulary				
	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. The final mark consists of the theoretical examination mark (oral), the herbarium note and the note of the practical work reports. The note of the practical work reports is definitively acquired.				
	Participation in practical work, tutorials and exercises is mandatory and essential to validate the teaching unit. Any unjustified absence entails a penalty on the TU examination which may go as far as the cancellation of the examination mark for the relevant study year (0/20). In the event of repeated and even justified absences, the teacher may propose to the jury to oppose the registration for the TU examination in accordance with article 72 of the RGEE				
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. theoretical lectures in auditorium and practical work in greenhouses and in the field				
Content	The structure, maintenance and functioning of the shoot apical meristem are studied. The genetic and physiological regulation of floral transition and floral morphogenesis (ABC model) are addressed as well as the development and functioning of the reproductive structures (inflorescences, flowers). The vegetative and sexual reproduction of Angiosperms is analyzed. The pollination processes, the pollen tube growth and fertilization mechanisms are described. Self-incompatibility systems are presented. Seed and fruit structure, formation and maturation are illustrated. Seed dormancy processes are studied. The different types of apomixis and their ecological importance are presented. The floral organography is detailed in order to introduce the student to the practical use of a flora and the identification of the main plants of our regions.				
Inline resources	website Biologie végétale.be and flore en ligne				
Faculty or entity in charge	BIOL				

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Aims	
Bachelor in Biology	BIOL1BA	3	LBIO1112	Q.	