

**Plant Physiology**

Code: 100823  
ECTS Credits: 6

Degree	Type	Year	Semester
2500251 Environmental Biology	OB	2	1

**Contact**

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**Use of languages**

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

**Prerequisites**

None

**Objectives and Contextualisation**

Vegetal Physiology is the first subject of a set of 3 that form the matter of Plant Physiology. It is compulsory and is attended in the first semester of the second year. The training objective of this subject is focused on the acquisition of competences within the framework of the theoretical and practical training of the student. Vegetal Physiology has as its training objectives the acquisition of knowledge of the different levels of organization of the organisms in its operation

**Content**

Master classes:

Concept and sources of information  
Cellular wall  
Water and nutrition relations  
Absorption and transport mechanisms  
Reduction and assimilation of C, N and S  
Metabolism C3, C4 and CAM.  
Mechanisms of regulation of growth.  
Phytohormones  
Sensing systems  
Regulation of development phases (germination, flowering, fruition, senescence)

Laboratory:

Determination of the water potential in vegetables.  
Study of the Hill reaction in isolated chloroplasts and their inhibition by DCMU.  
Measurement of the osmotic potential by the incipient plasmolysis method.  
Bioassay of cytokinin in barley leaf segments (*Hordeum vulgare*).  
Determination of nitrate content in vegetables

