Course Specifications
Valid as from the academic year 2018-2019

Botany 2: Physiology (I001837)

Course size
(nominal values; actual values may depend on programme)

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
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<tbody>
<tr>
<td>5.0</td>
<td>150 h</td>
<td>42.0 h</td>
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Course offerings and teaching methods in academic year 2018-2019

A (semester 1) Dutch lecture 42.5 h

Lecturers in academic year 2018-2019
Reheul, Dirk LA21 lecturer-in-charge

Offered in the following programmes in 2018-2019

| Bachelor of Science in Bioscience Engineering (main subject Agricultural Sciences) | 5 | A |
| Bachelor of Science in Bioscience Engineering (main subject Cell and Gene Biotechnology) | 5 | A |
| Bachelor of Science in Bioscience Engineering (main subject Chemistry and Food Technology) | 5 | A |
| Bachelor of Science in Bioscience Engineering (main subject Environmental Technology) | 5 | A |
| Bachelor of Science in Bioscience Engineering (main subject Land and Forest Management) | 5 | A |
| Joint Section Bachelor of Science in Bio-Engineering | 5 | A |

Teaching languages
Dutch

Keywords
Plant physiology, growth and development, stress physiology

Position of the course
The course studies the physiology of angiosperm plants. Life processes are explained as separate topics in a first part. The second part studies the growth and development of plants and their internal and external regulation. All aspects are illustrated and documented with examples of socially relevant plant species.

Contents

Part 1
Plants and water: uptake and transport
Plant and nutrients: function, uptake, transport and assimilation
Photosynthesis
Respiration

Part 2
Growth, development, differentiation, phenology
Responses on internal (plant hormones) and external signals
Plants in their environment
Stress physiology

Initial competences
Botany 2: Physiology builds on learning outcomes provided by course unit Botany 1

Final competences

1 Students know life determining processes in angiosperms relevant in primary production systems.

2 Students know how life determining processes are regulated both internally and externally.

(Approved)
The course has sharpened the students' drive for further knowledge acquisition and stimulated their interest in plant research.

4 Students are well prepared to take up plant-related courses in the master cycle.

Conditions for credit contract
   Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract
   This course unit cannot be taken via an exam contract

Teaching methods
   Lecture, self-reliant study activities

Learning materials and price
   Syllabus is available
   Cost: 20 EUR

References
   Relevant scientific literature and research results.

Course content-related study coaching
   The knowledge transfer aims at a creative knowledge acquisition.

Evaluation methods
   end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
   Written examination

Examination methods in case of periodic evaluation during the second examination period
   Written examination

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
   not applicable

Calculation of the examination mark

(Approved)