Course Specifications
Valid as from the academic year 2019-2020

Course

<table>
<thead>
<tr>
<th>Course size</th>
<th>(nominal values; actual values may depend on programme)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits</td>
<td>3.0</td>
</tr>
<tr>
<td>Study time</td>
<td>90 h</td>
</tr>
<tr>
<td>Contact hrs</td>
<td>42.0 h</td>
</tr>
</tbody>
</table>

Course offerings and teaching methods in academic year 2019-2020

<table>
<thead>
<tr>
<th>Offerings</th>
<th>Teaching methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (semester 2)</td>
<td>Dutch group work 2.0 h</td>
</tr>
<tr>
<td></td>
<td>fieldwork 4.0 h</td>
</tr>
<tr>
<td></td>
<td>lecture 24.0 h</td>
</tr>
<tr>
<td></td>
<td>excursion 12.0 h</td>
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</tbody>
</table>

Lecturers in academic year 2019-2020

- Haesaert, Geert (LA21 lecturer-in-charge)
- Werbrouck, Stefaan (LA21 co-lecturer)

Offered in the following programmes in 2019-2020

<table>
<thead>
<tr>
<th>Programme</th>
<th>Credits</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Horticulture)</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production)</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production)</td>
<td>3</td>
<td>A</td>
</tr>
</tbody>
</table>

Teaching languages

- Dutch

Keywords

- Outdoors vegetables, crop husbandry, potato

Position of the course

Plant- and crop sciences I and II are two key courses for plant production. The crops which are discussed cover nearly 95% of the total agricultural area in Belgium. Knowledge about the crop husbandry of these crops are very essential for the master in biosciences: agriculture and horticulture. For each crop the taxonomy, botanical characteristics, husbandry and specific crop protection measures are discussed.

Contents

**Plant- and crop science II:**

1. **Tuber crop**
   - Taxonomy, botanical characteristics, crop husbandry (crop rotation, fertilisation, varieties, quality aspects, e.g.) and crop protection of potato as case study
2. **Vegetable production in open field**
   - Taxonomy, botanical characteristics, crop husbandry (crop rotation, fertilisation, varieties, quality aspects, e.g.) and crop protection of pea, phaseolus bean, cabbage, leek, onion, celery, carrots, salsify, redish spinach and chicory as case studies
3. During a foreign study trip student get the opportunity to develop an international opinion about the topics of this cause.

Initial competences

- This course built on some competences of plant morphology and anatomy of plants, plant physiology, phyto technique and ecophysiology, crop protections, plant breeding, soil management and plant genetics.

Final competences

(Approved)
1. To be able to develop a crop husbandry system of crops mentioned above.
2. To be able to assist growers and to solve crop management problems.
3. To design a report and presentation on crop topics as harvest, quality analysis, varietal performance.
4. To be able to develop an international opinion on crop production.
5. To be able to manage the complexity of a crop production system.

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
   Excursion, group work, lecture, fieldwork.

Extra information on the teaching methods
   Course is illustrated with up-to-date slides.
   Students must do observation on the experimental farm.
   Excursions to vegetables and potato producing and processing facilities.

Learning materials and price
   Syllabus.

References
   Scientific literature, research results, trade journals, specialized websites.

Course content-related study coaching
   Possibilities to ask questions on a regular base.
   Study progress tests during practicum.

Evaluation methods
   end-of-term evaluation and continuous assessment.

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

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

Examination methods in case of permanent evaluation
   Written examination, report.

Possibilities of retake in case of permanent evaluation
   Examination during the second examination period is possible.

Extra information on the examination methods
   Theory: oral examination with open questions.
   Exercises: permanent evaluation, reports and test (can be done again in second examination period). 50% on reports/presentations and 50% on test.

Calculation of the examination mark
   Theory: 75%.
   Exercises: 25%.

(Approved)