Course Specifications
Valid as from the academic year 2016-2017

Course
Crop Protection (I700020)

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

<table>
<thead>
<tr>
<th>Credits</th>
<th>Study time</th>
<th>Contact hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>180 h</td>
<td>60.0 h</td>
</tr>
</tbody>
</table>

Course offerings and teaching methods in academic year 2018-2019

A (semester 2) Dutch
- fieldwork: 8.0 h
- lecture: 36.0 h
- practicum: 10.0 h
- project: 6.0 h

Lecturers in academic year 2018-2019

Haesaert, Geert LA21 lecturer-in-charge
Audenaert, Kris LA21 co-lecturer
De Cauwer, Benny LA21 co-lecturer

Offered in the following programmes in 2018-2019

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Credits</th>
<th>Offering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science in Bioscience Engineering Technology</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Linking Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Horticulture)</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Linking Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production)</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Linking Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production)</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Preparatory Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Horticulture)</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Preparatory Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production)</td>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>Preparatory Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production)</td>
<td>6</td>
<td>A</td>
</tr>
</tbody>
</table>

Teaching languages
Dutch

Keywords
Crop protection, plant phytopathology, entomology, herbology

Position of the course
Controlling the effect of weeds, pests and diseases is essential for plant production system to obtain an acceptable qualitative and quantitative yield level. To be able to develop an optimal control strategy an agronomist must have insight in disease- and live cycles of pathogens, pests and weeds respectively.

Contents
In a first part the most important causes of diseases and pests are discussed. Following organisms are included:
1. Pathogens (viruses, bacteria, MLO's, fungi)
2. Pests (nematodes, insects, mites, snails, mammals)
For each group the general characteristics as well as the parameters which are important for the development and presence of the disease or pest are given. In the second part weeds, weed dynamics and - control are discussed.

(Approved)
Initial competences

This course is based on some final competences of plant science (morphology, anatomy and physiology, animal science, biochemistry, microbiology and crop husbandry and ecophysiology)

Final competences

1. Having a thorough knowledge about plant diseases, pests and weeds which are present in our crop production systems

2. To be able to indentify diseases, pests and weeds by using of identification keys, basic knowledge and reference materials.
3. To be able to estimate the consequences of a disease, pest or weed population in relation to environmental conditions.
4. To be able to understand, select and interpret scientific literature about crop protection

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, practicum, project, fieldwork

Extra information on the teaching methods

Courses are illustrated with up-to-date slides
Practicum: identification of diseases, pests and weeds
Project: case study
Field work: evaluation of control strategies
Excursion: visit of a company which is active in crop protection

Learning materials and price

Syllabus and practicum guide is available

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
Practicum: reports, permanent evaluation and final test (final test can be done again in case of second examination period)

Calculation of the examination mark

Theory: 75 %
Practicum: 25 %

(Approved)