Course Specifications
Valid as from the academic year 2018-2019

Disease, Pest and Weed Control in Crops (I700175)

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>4.0</td>
<td>120 h</td>
<td>36.0 h</td>
</tr>
</tbody>
</table>

Course offerings and teaching methods in academic year 2018-2019

A (semester 1)
Dutch

<table>
<thead>
<tr>
<th>Lecture</th>
<th>24.0 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excursion</td>
<td>4.0 h</td>
</tr>
<tr>
<td>Fieldwork</td>
<td>4.0 h</td>
</tr>
<tr>
<td>Practicum</td>
<td>4.0 h</td>
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</tbody>
</table>

Lecturers in academic year 2018-2019

Haesaert, Geert
LA21 lecturer-in-charge

Offered in the following programmes in 2018-2019

<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>4</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>4</td>
<td>A</td>
</tr>
<tr>
<td>Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production)</td>
<td>4</td>
<td>A</td>
</tr>
</tbody>
</table>

Teaching languages
Dutch

Keywords
Pesticides, biological, physical, physiological and ecological control, resistance, integrated crop protection

Position of the course
These course is linked to crop protection and discuss the mean methods and techniques to control plant diseases, pests and weeds. An integrated approach are used to come to a sustainable crop protection system.

Contents

1. Effects of crop protection on yield level and - quality of crops
2. Overview of the mean methods to control plant diseases, pests and weeds.
3. Pesticides: legislation, toxicological and ecotoxicological characteristics, formulation and adjuvants, mode of action of active ingredients; physico-chemical characteristics
4. Integrated crop protection.

Initial competences
This course build on some final competences about morphology, anatomy and physiology of plants, animal science, organic chemistry, crop husbandry, ecophysiology and crop protection

Final competences

1. To be able to identify a disease -, pest - and weed problem and to develop a correct control strategy
2. Thorough knowledge of several groups of phytopharmaceutical products included their mode of action
3. To be able to use environmental indicators for determining the impact of control measures on environment
4. To be able to develop an integrated crop protection system

Conditions for credit contract

(Approved)
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, lecture, practicum, fieldwork.

Extra information on the teaching methods

Courses are illustrated with up-to-date slides.
Practicum: identify disease-, pest- and weed problem and look for an optimal control strategy taking into account the environmental impact of the measures chosen.
Field trip (experimental farm and farmers) and excursion to a company active in phytopharmaceuticals.

Learning materials and price

Syllabus is available (20€).
Specialized websites (e.g. fytoweb, milieumeetlat).

References

BCPC, Hampshire, UK.

Course content-related study coaching

Many possibilities to ask questions.

Evaluation methods

End-of-term evaluation and continuous assessment.

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

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: written examination with open and multiple choice questions; the wherein students must solve a weed-, disease- and pest problem is an open book exam.
Exercises: permanent evaluation, final test (student get a disease, pest or weed problem for which they must work out a solution), reports; final test can be done again in the second examination period.

Calculation of the examination mark

Theory: 80%.
Exercises: 20%.