Course Specifications
Valid as from the academic year 2019-2020

Plant and Crop Sciences 1 (I700171)

Course

Course offerings and teaching methods in academic year 2019-2020

A (semester 1) Dutch

- fieldwork 6.0 h
- lecture 36.0 h
- excursion 12.0 h
- group work 6.0 h

Contact hrs

Study time 110 h

Credits 4.0

Course size

(nominal values; actual values may depend on programme)

Contact hrs 60.0 h

Initial competences

The course plant- and crop science is based on certain final competences of the courses 'morphology and anatomy of higher plants', 'plant physiology', 'phytotechnics and ecophysiology', crop protections, plant breeding, soil management and plant genetics.

Teaching languages

Dutch

Keywords

Agriculture, crop production, crop husbandry

Position of the course

The courses plant and crop sciences I and II are the final parts of crop production. The crops discussed in this course cover approximately 95% of the agricultural area in Belgium; knowledge about the management of these crops is essential for a Master of Life Sciences in Agronomy. Botanical and phytotechnical aspects of selected crops are discussed.

Contents

Plant- and crop science I:

1. Small grain cereals and maize:
   - Taxonomy, botanical characteristics, crop management (rotation, fertilisation, varieties, quality issues, e.g.) and crop protection of winter wheat and maize as case studies.
2. Root crops
   - Taxonomy, botanical characteristics, crop management (rotation, fertilisation, varieties, quality issues, e.g.) and crop protection of sugar beet as case study.
3. Oil and fiber crops
   - Taxonomy, botanical characteristics, crop management (rotation, fertilisation, varieties, quality issues, e.g.) and crop protection of Canola and flax as case study.
4. Grassland
   - Taxonomy, botanical characteristics, crop management (rotation, fertilisation, varieties, quality issues, e.g.) and crop protection of grassland and grass species.
5. Students must be develop an international vision on crop sciences by way of an international study trip.

Offered in the following programmes in 2019-2020

- Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture  (main subject Plant and Animal Production) 4 A
- Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture  (main subject Tropical Plant Production) 4 A

Lecturers in academic year 2019-2020

Haesaert, Geert LA21 lecturer-in-charge

Teaching languages

Dutch

Keywords

Position of the course

Contents

Initial competences

(Approved)
Final competences

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 vision 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

Courses are illustrated with up-to-date slides.
Group task: data processing and statistical analysis of wheat varietal experiment; analysing of wheat samples on quality aspects.
Field work: observation and interpretation of field experiments.
Excursion: visits of farms and companies.

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.
Praticum: 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%.
Praticum: 25%.

(Approved)