Course Specifications
Valid as from the academic year 2019-2020

Plant Production and Ecophysiology (I700018)

Course

Course size
Credits 4.0
Study time 120 h
Contact hrs 36.0 h

Course offerings and teaching methods in academic year 2019-2020
A (semester 2) Dutch
lecture 24.0 h
excursion 4.0 h
practicum 4.0 h
fieldwork 4.0 h

Lecturers in academic year 2019-2020
Haesaert, Geert LA21 lecturer-in-charge

Offered in the following programmes in 2019-2020
crds offering
Bachelor of Science in Bioscience Engineering Technology 4 A
Linking Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production) 4 A
Linking Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production) 4 A
Preparatory Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production) 4 A
Preparatory Course Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Tropical Plant Production) 4 A

Teaching languages
Dutch

Keywords
Yield, crop production, ecophysiology, crop production systems

Position of the course
The physiological principles of plant grow, - development and crop production and the basic techniques of crop husbandry are the framework of this course. The course is essential for related master courses as crop protection, plant- and crop sciences, plant breeding en integrated crop production.

Contents
1. History of plant production
2. Agro ecosystems and plant production systems
3. Ecophysiological parameters and crop yield
4. Sink-sources relations and effect on crop yield
5. Growth modelling
6. Development of crops
7. Basic techniques of crop husbandry
8. Relation plant production and environment

Initial competences
This course is based on some final competences about plant morphology and anatomy and plant physiology

Final competences

(Approved)
1. To be able to understand the relationship between assimilation, water availability and sink-source relation on the one hand and crop yield on the other hand and translate this knowledge to appropriate crop husbandry measures.

2. To be able to interpret and analyse the components of a plant production system on an individual basis.

3. To be able to assess the impact of crop production on the environment.

**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, lecture, practicum, fieldwork.

**Extra information on the teaching methods**

Courses are illustrated with up-to-date slides.

Practicum: exercises on our experimental farm in Bottelare.

The student must follow up growth and development of significant crops.

Visit to a farm.

**Learning materials and price**

Syllabus and practicum guide is available.

**References**

Scientific literature, research results and agricultural trade journals.

**Course content-related study coaching**

Students have 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**

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 of all activities and final test (test can be done again in second examination period).

**Calculation of the examination mark**

Theory: 80 %

Practicum: 20 %

(Approved)