Course Specifications
Valid as from the academic year 2016-2017

Course
Crop Husbandry (I000909)

Lecturers in academic year 2018-2019
Reheul, Dirk
Van Labeke, Marie-Christine
LA21

Course offerings and teaching methods in academic year 2018-2019
A (semester 1)

- Dutch
- guided self-study 12.5 h
- group work 17.5 h
- lecture 23.75 h
- excursion 6.25 h

Offered in the following programmes in 2018-2019
Bachelor of Science in Bioscience Engineering (main subject Agricultural Sciences)
Master of Science in Bioscience Engineering: Cell and Gene Biotechnology
Master of Science in Bioscience Engineering: Land and Water Management
Master of Science in Bioscience Engineering: Food Science and Nutrition

Contact hrs: Study time 135 h, Credits 5.0

Teaching languages
Dutch

Keywords
Crop production and reproduction, farming and cropping systems, monocultures, polycultures, crop rotations, reduced tillage, ley farming, artificial substrates, plant propagation, leguminous crops, transgenic crops, field margins, agroforestry

Position of the course
The course is focused on sustainable crop production in a historical perspective and in an evolving world. Crop husbandry is disentangled into several determining aspects. The course prepares students for in depth studies further on.

Contents
1. Terminology, statistics, organisation of crop production, technical and legal aspects of crop reproduction
2. Origin of plant production
3. Basic principles in plant production, growth and production curves, root growth, interand intraspecific competition
4. Propagation of crop plants
5. Soilless cropping
6. Minimal tillage
7. Leguminous crops
8. Catch crops, cover crops
9. Intercropping
10. Growing genetically modified crops
11. Crop rotation, ley-arable farming
12. Agro-ecology
13. Growing crops in marginal areas, field margins, functional biodiversity
14. Agroforestry
15. On-farm acquisition of crop characteristics and of seeds of a series of field crops

(Approved)
Initial competences
Crop Husbandry builds on learning outcomes provided by the following course units: Botany 1: Morphology, Anatomy and Diversity; Botany 2: Physiology; Sustainable Production Systems.

Final competences
1. Students **know** the principles of crop husbandry
2. Students **know** the potential and constraints of different crop production systems.
3. Students **know** a series of innovations in crop production systems and crop husbandry and **can** reflect critically upon them.
4. Students **can** reflect on plant production systems from a historical point of view.
5. Students **can** identify the most important field crops and their seeds or propagation material

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
Guided self-study, excursion, group work, lecture

Learning materials and price
A syllabus is available. Cost: 20 EUR

References
Relevant scientific literature and research results.

Course content-related study coaching
Students are stimulated into a creative knowledge acquisition. An active 'on-farm' data acquisition of a number of crops is a compulsory part of this course. Coached exercises confront students with actual research and trends in crop husbandry and production systems.

Evaluation methods
end-of-term evaluation

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

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

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
not applicable

Calculation of the examination mark
The weight of (i) the oral exam and (ii) the report of the group activity and the excursions is 2/3 and 1/3 respectively. A different dedication to the group activity may lead to different marks for the group members. Students with an insufficient dedication in the group activity or with an unmotivated absence in the excursions can not earn their credits.

(Approved)