Course Specifications
Valid as from the academic year 2016-2017

Integrated Study of a Farm (I700180)

Course size
( nominal values; actual values may depend on programme)
Credits 4.0
Study time 110 h
Contact hrs 60.0 h

Course offerings and teaching methods in academic year 2019-2020
A (year) Dutch lecture 24.0 h
A (year) Dutch group work 36.0 h

Lecturers in academic year 2019-2020
Nevens, Frank
LA21 lecturer-in-charge

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

Teaching languages
Dutch

Keywords
Farm management - economic farm account - nutrient balances - crop systems - crops and rotations - biodiversity on the farm - environmental legislation consequences - performance parameters plant and animal production - farm optimisation.

Position of the course
The course aims to implement the knowledge acquired from diverse disciplinary courses on an existing Flemish farm. The specific farm accounting documents are the basic source of information. Essentially, the aim is to construct a coherent and integrated picture/narrative of the actual functioning of the considered farm. Besides the merely agronomic aspects, also rational uses of energy, water, nutrients, soils, etc. are included. Starting from a situation ‘as is’, a subsequent trajectory for optimisation is developed, thereby explicitly considering sustainable development. Students work in groups (5 to 10 people); each group studies a different, existing Flemish farm.

Contents
By lectures and seminars, the following topics are introduced to the students:
• Crop rotation and crop selection
• Performance parameters plant production
• Performance parameters animal production
• Farm economy performance parameters
• Use of green manures
• On-farm biodiversity
• Animal health and welfare
• Nutrient balances
• Energy and water management
• EU agricultural policy
• Protein crops and mixed crops
• Manure and environmental legislation
• Soil condition and management

Initial competences
Knowledge of Bachelor Biosciences

Final competences
1 To be able to analyse the complexity of a farm’s functioning: recognising and explaining the interrelatedness of the diverse aspects of farm management.
2 To be able to develop optimisations for individual farm components as well as for the

(Approved)
integrated farm management.
3 Acknowledging essential elements of sustainable farm management and effectively integrating them in advices for a concrete farm.

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
Group work, lecture

Extra information on the teaching methods
Lectures, seminars: about diverse elements that are deciding/characterising for the integrated study of a farm. The lectures/seminars are provided by the responsible teacher as well as external experts and/or internal colleagues.
Group work: the integrated description of a specific farm is developed in groups of 5 to 10 students. Description as well as optimisation is established by the own organisation and management of the individual groups. Assistance from the responsible teacher is available (not compulsory); for specific elements of information, the seminar teachers can be contacted.

Learning materials and price
Slides series per key topic/seminar are available
Farm accountancy data are provided (incl. guidelines)
Autonomous quests for relevant information (parameter references, optimisation possibilities) is part of the group work.

References

Course content-related study coaching
Frequent possibilities to ask questions (also to all seminar providers)
Tutor (responsible teacher) accompanies the group work and takes part in the group meetings/working sessions (on request of the group).

Evaluation methods
end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions

Examination methods in case of permanent evaluation
Assignment, peer assessment

Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible in modified form

Extra information on the examination methods
Written examination, open questions: on the content of the seminars/lectures.
Group work: evaluation by responsible teacher and a jury of seminar teachers (and possibly external experts). Peer evaluation within each group.
Possibility to obtain an alternative case study in second examination period if project was not satisfactory.

Calculation of the examination mark
Written exam: 33%
Group work: 67% (individual student score also determined by peer assessment results).
Students need to participate to all exams/assignments to succeed; for the aspects of permanent as well as non-permanent evaluation. The end assessment is a weighted average of the of the two subscores: 33% written exam, 67% personal work. A score of less than 7/20 for a subscore entails that the total score can not be higher than the lowest 'not-passed' quotation (9/20).

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