

## Integrated Exercises: Crops, Animals and Agricultural Farm (I700260)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits 3.0** **Study time 90 h**

**Course offerings in academic year 2023-2024**

A (Year) Dutch Gent

**Lecturers in academic year 2023-2024**

Ingels, Katrijn	LA22	staff member
Degroote, Jeroen	LA22	lecturer-in-charge
Derycke, Veerle	LA21	co-lecturer

**Offered in the following programmes in 2023-2024**

	crdts	offering
<a href="#">Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture (main subject Plant and Animal Production)</a>	3	A

**Teaching languages**

Dutch

**Keywords**

Livestock, arable farming, farm management, sustainability

**Position of the course**

This course unit is part of the pursuit of multidisciplinary thinking, knowledge integration and internationalisation with a focus on animal and plant production. By integrating animal and plant production, we want to evolve towards a more sustainable agriculture, e.g. by better closing mineral and carbon cycles and better coordinating local feed production with animal production. The course is focused on practice and consists of practicals and farm visits preceded by short introductions.

**Contents**

Practical sessions on the following topics will be organised:

- 1 Two farm visits integrating animal and plant production;
- 2 Company visit in relation to concentrate feed production with focus on raw material flows;
- 3 Three interactive lectures on topical agricultural themes (e.g. climate change and consequences for agricultural production, financial sustainability of farms, environmental aspects, water management on farms, etc.). One of the lectures will take place within the framework of internalisation@home.
- 4 Company visit on mineral cycles in plant and animal production systems (manure processing, circular economy, etc.).
- 5 International study trip. If, for special reason, it is not possible to participate to this study trip, a replacement assignment will be provided.

**Initial competences**

Basic knowledge of plant and animal production; students must have successfully completed the following course units: Phytotechnology and ecophysiology, Crop protection, Plant breeding, Digestive physiology, Reproductive physiology

**Final competences**

- 1 To be able to critically evaluate production precesses and lecures and check them on their sustainability
- 2 To be able to recognise company/farm problems and suggest suitable solutions.
- 3 To be able to interpret and process agricultural themes into a report
- 4 To be able to develop an international vision about agriculture

**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, Excursion, Lecture

### **Extra information on the teaching methods**

After each activity, students are asked to write a critical report with the following content: description of production process with attention to a chain approach, activity or lecture, critical reflection on sustainability factors and, if relevant, an international approach.

Regarding the study trip, students are expected to make a report of the companies/institutions visited with reference to the Flemish/European situation. The intention is to provide a comparative study/description. The report consists of a publishable article (e.g. newspaper article or documentary/reportage), supported by an extensive video report.

### **Learning materials and price**

Slides of introduction courses

Cost study trip: €1500-€2000

### **References**

Scientific literature and reports (e.g. from VLM, agricultural department, FAO rapporten [www.fao.org](http://www.fao.org))

### **Course content-related study coaching**

Introduction course and permanent possibility to ask questions.

### **Assessment moments**

#### **Examination methods in case of periodic assessment during the first examination period**

#### **Examination methods in case of periodic assessment during the second examination period**

#### **Examination methods in case of permanent assessment**

#### **Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible in modified form

#### **Calculation of the examination mark**

25% evaluation on active participation and attitude during excursions

50% on reports

25% on written test

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner (ie if mathematically the final score is 10/20 or more, then this score becomes 9/20).