Course Specifications
Valid as from the academic year 2016-2017

Case studies Animal Production (I001984)

Course
Lecturers in academic year 2017-2018
Haesaert, Geert
LA21 lecturer-in-charge

Offered in the following programmes in 2017-2018
Master of Science in Bioscience Engineering: Agricultural Sciences

Course size
(nominal values; actual values may depend on programme)
Credits 5.0
Study time 125 h
Contact hrs 75.0 h

Course offerings and teaching methods in academic year 2017-2018
A (year)
Dutch

<table>
<thead>
<tr>
<th>Teaching method</th>
<th>Contact hrs</th>
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<tbody>
<tr>
<td>Microteaching</td>
<td>6.25 h</td>
</tr>
<tr>
<td>Group work</td>
<td>15.0 h</td>
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<tr>
<td>Seminar</td>
<td>17.5 h</td>
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<tr>
<td>PDE tutorial</td>
<td>23.75 h</td>
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<tr>
<td>Guided self-study</td>
<td>6.25 h</td>
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<tr>
<td>Excursion</td>
<td>6.25 h</td>
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Study time 125 h
Credits 5.0
Course size

Teaching languages
Dutch

Keywords
animal husbandry, animal nutrition, animal health, animal genetics, animal products, farm management

Position of the course
To respond to current challenges, often concerning animal welfare and environmental burden, continuous innovation in the livestock sector is indispensable. This requires an integrated approach and integration of knowledge from different disciplines. Therefore, in this course, the future bioengineer experiences the ‘practice’ of many subdisciplines in animal husbandry. This experience will be used to analyse a timely problem or a new trend in animal husbandry and to propose creative approaches to search for solutions and their implementation. To identify/formulate the topic and global approach ‘the sector’ (e.g. companies, ministries, extension services, ...) will be consulted.

Contents
Preparation of a plan for problem solving, eventually with a proposal of research plan or of feasibility studies for implementation of new technology
Subdisciplines which could be covered:
• Husbandry systems: housing, animal care, animal management, animal health, management systems
• Animal nutrition: choice of and prerequisites for feedstuffs, feeding systems
• Animal Genetics: breeds, selection, crosses
• Animal products: characteristics, quality, evaluation
• Legislative framework: new regulations, production conditions, environmental aspects, animal welfare
• Economics of livestock production: cost-benefit analysis
• Diagnostic methods and laboratory analyses

Initial competences
Case studies Animal Production builds on certain learning outcomes of course units ‘Animal Production Systems’ and ‘Animal Production Biology’; or the learning outcomes were achieved differently.
At least two of the following elective course have been followed or are followed simultaneously: Animal Nutrition, Sustainable Animal Husbandry, Applied Animal

(Approved)
Final competences
  Being able to formulate a practically useful advice and solution to a problem in the livestock sector. Being able to assess the value of new technologies and prerequisites for their implementation. To document, analyze, interpret and present relevant topics in animal husbandry in a scientifically sound manner.

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, microteaching, PDE tutorial, seminar

Extra information on the teaching methods
  This course is a mixture of assignments (to be carried out in groups or individual), excursions to industrial partners, extension services, government agencies, agricultural organizations and possibly other bodies or institutions, guest speakers on specific topics, ...

Learning materials and price
  Learning material is either searched for by the students themselves (as part of their training), or provided by the teaching staff. The cost is variable but limited. Estimated cost: 10 euro.

References

Course content-related study coaching
  There will be an intensive coaching and collaboration between students and teaching staff, assistants and non-academic professionals.

Evaluation methods
  continuous assessment

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

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

Examination methods in case of permanent evaluation
  Participation, assignment, report

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
  The students will be evaluated based on their participation to the different activities (presence, contribution, scientific participation) and on their reports on these activities (excursions, group and individual works).
  The oral exam includes a discussion with the student in relation to the case study.
  Additionally, questions will be prepared by field experts in relation to the case study.

Calculation of the examination mark
  Calculation will differ from year to year, based on the activities. Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.