

## Ruminant and Porcine Herd Health Medicine, with Clinical Training I (G000771)

Due to Covid 19, the education and assessment methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

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

**Credits 7.0**                      **Study time 210 h**                      **Contact hrs**                      80.0h

**Course offerings and teaching methods in academic year 2021-2022**

A (semester 2)                      Dutch                      Gent                      lecture                      50.0h

**Lecturers in academic year 2021-2022**

Opsomer, Geert	DIO8	lecturer-in-charge
Janssens, Geert	DIO7	co-lecturer
Maes, Dominiek	DIO8	co-lecturer
Piepers, Sofie	DIO8	co-lecturer

**Offered in the following programmes in 2021-2022**

	<b>crdts</b>	<b>offering</b>
<a href="#">Master of Veterinary Medicine in Veterinary Medicine(main subject Pig, Poultry and Rabbit)</a>	7	A
<a href="#">Master of Veterinary Medicine in Veterinary Medicine(main subject Research)</a>	7	A
<a href="#">Master of Veterinary Medicine in Veterinary Medicine(main subject Ruminants)</a>	7	A

**Teaching languages**

English, Dutch

**Keywords**

Farm animals:  
 -breeding, selection, production traits;  
 -nutritional aspects related to the role of the veterinarian in the farm animal profession;  
 -aspects of reproduction and obstetrics related to general herd health in farm animals.  
 -housing of farm animals

**Position of the course**

This course is an introduction to the specialized production traits of farm animals. Since production by farm animals is largely dependent on genetics and breeding, nutrition, housing and reproductive performance of the animals, this course will mainly concentrate on these aspects.

The students will be taught how veterinarians in the field can contribute towards an optimal animal production level while maintaining optimal health and welfare. Therefore it corresponds with the general objectives of the master education, namely the judgement of the interactions between human being and animal and their position within the broader society.

**Contents**

This course describes the productive characteristics and patterns of the most important specialized species of farm animals that are kept in view of human food consumption (dairy cattle, beef cattle, pigs, poultry, scheid). Also the selection procedures used in practice for the optimisation of (productive) performances are discussed.

The student will learn how to interpret and analyse the most important contributors to animal production (analyse and interpret reproductive performance, nutrition (by ration calculation), housing, genetics (interpretation and use of breeding values in order to increase production taking into account animal health, animal welfare and herd economics).

Students will also be learned to critically discuss the role of animal production in a

social context, taking into account environmental issues and aspects of animal welfare and the correct use of drugs in order to stimulate production.

Furthermore, students will be taught how they can contribute in practice in optimizing animal production while maintaining animal health and welfare.

### **Initial competences**

It is very useful that the students previously studied the courses 'biomedical statistics, computational biology and knowledge acquisition' and 'ethnography and exterior appreciation of domestic animals' during the bachelor education. The course 'concepts of quantitative genetics' must have been studied previously.

Subscribing for this course is only possible after obtaining a bachelor degree in veterinary medicine or when enrolled in a GIT trajectory in veterinary medicine between the third bachelor and first master year.

For students who are not currently enrolled in the UGent veterinary medicine studies is subscription for this course only possible if they comply with the majority of final competencies of the bachelor in veterinary medicine degree and after approval of the curriculum commission.

### **Final competences**

- 1 Students should achieve knowledge and insight in the methods used for the genetic amelioration of populations of domestic animals, using selection and crossbreeding procedures. They should discriminate the most appropriate traits in this respect. Doing so, the following final attainment levels of the master education are reached : first, the acquisition of general competences of critical and scientific thinking and acting, second the ability of consulting and cooperating with colleagues, biologically trained people and herd managers.
- 2 Students should know to optimize nutrition in farm animals with respect to optimal health and production.
- 3 The student is able to assess the reproductive performance at a livestock farm, and to solve eventual problems and/or give advise to optimize it.
- 4 The student is stimulated to practice evidence based medicine throughout all his activities in animal production.
- 5 The student is aware of the importance of continuing education in order to perform his job at an optimal level.
- 6 When trying to solve a herd problem in farm animals, the student takes into account aspects at the animal level (health and welfare) - the level of the herd manager (economics and labor) - the public (veterinary public health - correct use of drugs).
- 7 The student is aware of a good communication and collaboration among the different advisors that work on livestock farms.
- 8 The student is fully aware of the importance of animal production in the society.
- 9 The student is fully aware of the importance of sustainability in livestock animals.
- 10 The student is able to advise herd managers about housing of production animals aiming for an optimal production while maintaining animal health and welfare.

### **Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

### **Conditions for exam contract**

Access to this course unit via an exam contract is unrestricted

### **Teaching methods**

Practicum, Demonstration, Lecture

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

Formal lectures are given; questions and discussions are allowed during the lectures. Also practical classes, demonstrations and herd visits will be organized to teach the students in a more practically applied way.

### **Learning materials and price**

This consists of a syllabus and the PowerPoint presentations, used during the courses and available on Ufora.

### **References**

**Course content-related study coaching**

No formal tutoring is provided for this course. Nevertheless the students are free to contact the teacher for further explanations and discussions at any time after the formal lectures (e-mail, personal talks). Both in the practicals and during the herd visits students will work in small groups which facilitates direct contact with staff members.

**Assessment moments**

end-of-term and continuous assessment

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

Written examination, Participation, Job performance assessment

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

Written examination, Participation, Job performance assessment

**Examination methods in case of permanent assessment****Possibilities of retake in case of permanent assessment**

not applicable

**Extra information on the examination methods**

Examination in writing about the study material discussed during the colleges.

Emphasis is on both factual knowledge and insight.

Permanent evaluation (behaviour and participation) in the practical sessions.

**Calculation of the examination mark**

Students who eschew aligned evaluations for this course may be failed by the examiner.

Item Reproduction, Obstetrics and udder health contributes for 50% in the total score.

Item Nutrition contributes for 25% and the items 'Housing and animal breeding' together as a whole also contribute for 25%.

When a student scores lower than 8/20 in at least one of these 3 items, he/she can not succeed for this course. Even if the total score is then higher than 10/20, the student will obtain the highest score indicating failure (9/20).