Course Specifications
Valid as from the academic year 2018-2019

Animal Behaviour, Wellfare, Hygiëne and Housing (G000738)

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

Credits 6.0 Study time 180 h Contact hrs 85.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 2) Dutch lecture 60.0 h

Microteaching 5.0 h

Seminar 13.75 h
demonstration 2.5 h
group work 2.5 h
PDE tutorial 1.25 h

Lecturers in academic year 2018-2019

Moons, Christel DI07 lecturer-in-charge
De Keuster, Tiny DI51 co-lecturer
De Vliegher, Sarne DI08 co-lecturer
Maes, Dominiek DI08 co-lecturer
Tuyttens, Frank DI51 co-lecturer
van Dierendonck, Machteld DI51 co-lecturer
Van Immerseel, Filip DI05 co-lecturer

Offered in the following programmes in 2018-2019

Bachelor of Science in Veterinary Medicine crdts offering

6 A

Teaching languages

Dutch

Keywords

animal hygiene, disinfection, cleaning, animal health, housing

Position of the course

The part of animal behaviour and welfare familiarizes students with species-specific behaviour of several animal species, as well as species-specific welfare and welfare problems. Next, an introduction into the systematic assessment of welfare is given. Finally, the basic principles of veterinary ethics are discussed. The part housing of animals aims at making the students familiar with all general aspects of housing of different animal species, including aspects of climate control. The primary objective of the course hygiene is for the student to understand the general principles of preventive hygiene and disinfection at the level of the individual animal, at the level of the epidemiological unit, as well as at the community level. Emphasis is put on critical assessment of risk factors and on the public health significance of hygienic measures. The objective of this course fits in with the objectives of the bachelor training in veterinary medicine, since it provides basic knowledge in biomedical science in a broad medical and social context.

Contents

The part of animal behaviour / welfare deals with species-specific behaviour (dog, cat, horse, cattle, pig, chicken and some exotic animals) and welfare problems, with reference to the laboratory animal context. Emphasis is put on the scientific evaluation of welfare (to what extent is there a problem?) and measures likely to improve housing and management. During the lectures about veterinary ethics, issues encountered by veterinarians in practice are discussed. In the part housing the relation between animal and the environment is studied, in which the optimalisation of animal health,
productivity and welfare are taken into account, as well as economical, ethological, ergonomical and ecological aspects. In the first part of the hygiene course the different hygienic aspects of the environment in which the animals live are analyzed. This includes a critical review of contamination risks associated with air, water, soil, the concepts of hygienic measures for disease prevention and quarantine. In the second part the general principles of cleaning and disinfection are discussed, including the general characteristics of different types of disinfectants, their application and health hazards potentially associated with the use of disinfectants. Attention is also paid to the problems of resistance to disinfectants and problems of environmental pollution by residues of disinfectants. The third part focuses on the control of rodents and insects. Finally the general principles and concepts which were discussed in the first 3 parts are being applied to the poultry production chain and laboratory animals, as an example of how these concepts can be put into practice.

Initial competences

The course "Ethology, Ethics and Animal Welfare" can only be taken if the student has taken the following other courses (G000716, G000718, and G000734), or if the starting competencies of the student were evaluated by the individual lecturer and were considered to be sufficient. Simultaneous uptake of the lectures Virology, Parasitology and Bacteriology is obligatory. Inclusion of this course in the student's curriculum must occur in agreement with the governing rules of the personalised learning track of the academic year in which the course is taken.

Final competences

1. Give advice to owners regarding how to prevent infectious disease by optimizing housing conditions and hygienic measures.
2. Critically judge the value and weaknesses of various changes in animal housing conditions, hygiene and disinfection programs and protocols.
3. Be aware of the need of preventive hygiene and good housing conditions in animal husbandry.
4. To have a scientific working knowledge about the ontogeny, the sensory capabilities, the behaviour and development thereof in the animal species that have been discussed (companion animals, farm animals, laboratory animals).
5. Being able to interpret the behaviour of each animal species that was discussed, in the framework of evolution and take into account phylogenetic influences.
6. Establish the effect of early-life experiences as well as those of the physical and social environment.
7. Recognize abnormal behaviour and analyse potential causes.
8. Recognise, correctly identify, prevent and suggest treatment of normal, abnormal behaviour and stress related parameters in equidae.
9. To have knowledge of the possibilities of equidae to adapt to their environment, as well as knowledge and insight in in the causes and development of abnormal behaviour such as the influence of husbandry, management, use (handling, training and pressure to perform) and/or feeding.
10. To have sufficient insight in the scientific approach of animal welfare and veterinary ethics.
11. To master the basic principles of welfare and housing of the animal species that have been discussed, including the regulating authorities.
12. To be aware of the ethical and societal implications of keeping, using, and interacting with animals, both in a national and international context.
13. To be convinced of the important normative role of the veterinarian in the public debate about animal welfare.
14. To research scientific information independently, to critically synthesize and analyze it.
15. To independently and critically analyse a problem, to assess and solve it.
16. To do scientific observations and to interpret them critically and creatively.
17. To communicate fluently and orally about data collected by the student him/herself and or by third parties.
18. To elaborate on and/or defend a line of reasoning scientifically.
19. To function as a team during group work and to execute simple coordination tasks.

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

Demonstration, group work, lecture, microteaching, PDE tutorial, seminar.

Extra information on the teaching methods

**Animal Behaviour and Welfare.** Mainly oral lectures, with plenary exercises,
demonstrations, group work, PGO-tutorial and microteaching during the practical work. For the microteaching assignment, students have to build and present scientific reasoning regarding a statement about animal behaviour, animal welfare or veterinary ethics.

**Hygiene and housing.** Teaching is in the form of oral lectures. There are no practical exercises for this course. Students however are encouraged to apply the general principles of this course during their practical clinical training in the 3MA.

Learning materials and price

A printed syllabus and/or PowerPoint slides are available. Reference is made to textbooks and scientific papers. All PowerPoint presentations are available on Minerva.


References

Course content-related study coaching

There is no formal tutoring for this course. Study problems are discussed and solved by direct personal contact with the lecturer.

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, written examination with multiple choice questions

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

Written examination with open questions, written examination with multiple choice questions

Examination methods in case of permanent evaluation

Assignment

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

**Animal Behaviour and Welfare.** Written exam with 60 multiple choice questions (5 to 15 questions with 4 answer options and 55 to 45 questions with 3 answer options; 1 correct answer option per question). The exam encompasses the content of the syllabus, its discussion during classes and explanations given during the exercises.

**Housing.** Written. part is multiple choice (max. 20 questions, 4 answer options with 1 or 2 correct; 1 point per completely correct answer; 0 points for a wrong or incompletely correct answer), the exam content exists of topics discussed during the lectures.

**Hygiene:** written examination consisting of two-choice questions (with standard setting). Examination content consists of subjects mentioned during lectures

Calculation of the examination mark

Score is calculated as weighed mean depending on the actual number of hours lectures per part (animal behaviour/welfare, housing and hygiene). For each of the 3 parts at least 8/20 should be reached. If not, a score of 9/20 will be assigned.