

Laboratory Animal Science I (D002122)

Due to Covid 19, the education and evaluation 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 5.0 **Study time** 150 h **Contact hrs** 40.0 h

Course offerings and teaching methods in academic year 2021-2022

A (semester 1)	English	Gent	lecture	30.0 h
			practicum	3.75 h
			demonstration	6.25 h

Lecturers in academic year 2021-2022

Hermans, Katleen	D105	lecturer-in-charge
De Spiegelaere, Ward	D103	co-lecturer

Offered in the following programmes in 2021-2022

	crdts	offering
Master of Science in Biomedical Sciences	5	A

Teaching languages

English

Keywords

laboratory animal science, welfare, the 3 R principle

Position of the course

The goal of this course is to provide the student with basic knowledge concerning the use of laboratory animals. The student should learn to know about the specificities of different animal species, e.g. concerning morphology, physiology, requirements for nutrition, etc. Furthermore, the students should acknowledge the advantages and disadvantages of animal use and the importance of optimising laboratory animal welfare.

Contents

In several short sessions, topics such as morphology, physiology, reproduction, immunology, nutrition and diseases of laboratory animals are discussed, as well as some general topics such as pharmacology, medical imaging and anaesthesia. During practical sessions, some handling and experimental techniques used in laboratory animals will be illustrated. Alternative methods (without the use of laboratory animals) are used as much as possible for these purposes.

Initial competences

Having insight in chemical and physiological processes and microbiology as documented in the relevant courses of a bachelor program of the university scientific disciplines.

Students in biomedical sciences need to have completed successfully the course microbiology from the 3th bachelor in biomedical sciences.

Final competences

- 1 The student has knowledge and insight in the specificities of laboratory animals, mainly the small rodents.
- 2 The student is aware of the fact that a thorough knowledge of an animal species is required before using this animal in a specific experiment.
- 3 The student understands the sociological relevance and implications of the use of animals in experiments.

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, lecture, practicum

Extra information on the teaching methods

The lecturing consists mainly of plenary lectures. If possible, these will be made interactive. Furthermore, demonstrations regarding experimental techniques are given. Hands on practical sessions are also included. In the latter, a.o. animal morphology is studied, and basic surgical techniques are practiced.

Learning materials and price

The learning material consists of the lecture notes and material for the practical. During the lectures, further information sources such as books and internet sites, are mentioned. The language of the course notes is English. The price of the learning material will be about 25 euros.

Ghent University offers extra learning material free of charge through the libraries and electronic databases

References**Course content-related study coaching**

No formal study guidance is provided for this course. In case of problems, you can contact the lecturer(s).

Evaluation methods

end-of-term evaluation

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**Possibilities of retake in case of permanent evaluation**

not applicable

Extra information on the examination methods

The examination method is a periodic evaluation (written exam with open questions as well as multiple choice questions). The contents of the examination consist of the topics discussed during the lectures and the practical sessions.

Calculation of the examination mark