Course: HV0195 Designing Breeding Programmes, 15 ECTS, 2022

Grading criteria* and forms for examination for the different learning goals

Grades and criteria	**5**	The student critically evaluates other students' projects and plays an active role in the discussion.	The student describes the socioeconomic conditions for international and national breeding organisations.	The student critically evaluates estimates of breeding values, genetic progress and inbreeding rate.	The student suggests relevant changes of a breeding programme in order to improve animal or human welfare or mitigate global warming.	The student suggests how to handle goal conflicts between different sustainability aspects related to breeding.
	4	The student makes use of results and conclusions from several relevant articles.	The student explains general differences and similarities between breeding programmes for different species.	The student chooses relevant methods and models for estimating genetic parameters, breeding values and genetic progress.	The student suggests relevant changes of a breeding programme in order to adapt it to changes in the production system	The student describes goal conflicts between different sustainability aspects related to breeding.
	3	The student reviews scientific literature critically (e.g. enough data, relevant methods, conclusions based on results), and makes use of results or conclusions from scientific articles.	The student describes how the breeding organisations involved in the projects function and explains why these breeding programmes are designed the way they are.	The student estimates genetic parameters, breeding values and genetic progress with given methods and models.	The student designs breeding programmes for the species studied in the projects.	The student assess animal breeding programmes regarding different sustainability aspects and suggests improvements of these programmes.
Learning goals		1. Critically review scientific literature on animal breeding.	2. Describe how breeding organisations work and explain why the breeding programmes of today are designed the way they are.	3. Estimate genetic parameters, breeding values and genetic progress.	4. Design breeding programmes for domestic animals of different species, in various environments and production systems.	5. Assess animal breeding programmes regarding different sustainability aspects and suggest concrete measures to improve these programmes.
Forms for examination		Project report, discussions on literature and during project presentations.	Written exam and project report.	Reports from computer exercises and written exam.	Project report and written exam.	Written exam, project report, project presentation and discussion during project presentations.

* The criteria for grade 4 and 5 describe what is needed in addition to the criteria for the lower grade/grades.

Final grading

To receive grade 3 (passed) the student should reach at least grade 3 on all five learning objectives and participate in all compulsory parts of the course.

For the written exam, grade 3, 4, and 5 equals approx. 60%, 75% and 90% of the total score, respectively.

In addition to the written exam, the student should write reports from computer exercises, write and present a project report and participate in the discussion of the other students' projects. For the total course grade, approx. 75% of the weight is placed on the written exam. To receive grade 5 on the course, the grade on the project and computer exercise reports must be at least 4. If more than two examinations are needed for a student to pass the course, then 4 is the highest possible grade for the course for that student.