



## Course syllabus

Faculty of Health and Life Sciences

Department of Biology and Environmental Science

4BI229 Djurhållning och djurvälstånd, inriktning lantbrukets djur, 15 högskolepoäng

Husbandry and Animal Welfare of Farm Animals, 15 credits

### **Main field of study**

Biology

### **Subject**

Biology

### **Level**

Second cycle

### **Progression**

A1N

### **Date of Ratification**

Approved 2025-11-03.

The course syllabus is valid from autumn semester 2026.

### **Prerequisites**

- Bachelor's degree in biology or equivalent, including 15 credits in ethology or behavioral ecology, or
- Bachelor's degree in environmental science or equivalent, and biology 60 credits including 15 credits in ethology or behavioral ecology, or
- Bachelor's degree in equine science or equivalent and 60 credits in Biology including 15 credits in ethology or behavioral ecology, and
- English 6/nivå 2 or equivalent, and
- Swedish 3/nivå 3 or equivalent

### **Objectives**

#### **Module 1: Farm animals, 12 credits**

After completing the module, the student should be able to:

- describe key concepts such as welfare, domestication, stress, pain, and suffering
- assess whether the housing and management of farm animals (cattle, pigs, poultry, sheep and goats) comply with current legislation and explain their reasoning
- identify and analyse the advantages and disadvantages of different husbandry systems with regard to animal welfare
- evaluate housing and production conditions when assessing animal husbandry
- reflect on and evaluate the consequences of different aspects (such as genetics, feeding and management) of animal husbandry when assessing animal welfare
- critically examine and analyse the living conditions and behaviour of farm animals
- evaluate and reflect on the underlying causes of normal and abnormal animal behaviour
- analyse the need for environmental enrichment for farm animals and how this can be implemented to promote animal welfare
- evaluate whether current legislation meets the requirements for achieving good animal welfare.

### **Module 2: Scientific theory and methodology, 3 credits**

After completing the module, the student should be able to:

- describe key theoretical perspectives relevant to the field and explain their use in different contexts
- describe and critically examine principles of knowledge production and evaluation in research
- independently formulate relevant research questions
- analyse and critically reflect on research findings, with particular consideration of the strengths and limitations of the method and its implications for the interpretation of results.

## **Content**

### **Module 1: Farm animals, 12 credits**

- Central terms and concepts (e.g. welfare, domestication and breeding, stress, pain, and suffering)
- Husbandry systems and their significance for animal welfare (cattle, pigs, poultry, sheep and goats)
- Current regulations governing the use and keeping of farm animals
- Housing, feeding, rearing and management of farm animals
- Normal and abnormal behaviour of farm animals in different farming environments
- Environmental enrichment for farm animals
- How regulations are formulated in relation to ethical principles and societal needs.

### **Module 2: Scientific theory and methodology, 3 credits**

- Basic concepts in the philosophy of science
- Introduction to scientific thinking and methods of knowledge development
- Differences between science and pseudoscience
- Formulating research questions
- Introduction to methodological approaches in relation to research questions
- Structured analysis of research findings

- Literature search and academic writing.

## Type of Instruction

Teaching is delivered through lectures and exercises via the university's digital learning platform. Participation in exercises is rewarded with bonus marks in the examination and the resit examination for Module 1.

English may be used as the language of instruction.

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Module 1 is assessed through an individual written examination worth 8 credits (U–VG) and through individual written assignments and oral presentations worth a total of 4 credits (U–G).

Module 2 is assessed through individual written assignments worth a total of 3 credits (U–G), of which one includes peer-review.

To achieve a Pass for the course, all assessed components must be passed. To achieve a Pass with Distinction, in addition to passing the assignments, a Pass with Distinction in the examination is required.

Resit examination is offered in accordance with Linnaeus University's Local regulations for courses and examination at the first- and second-cycle levels. In the event that a student with a disability is entitled to special study support, the examiner will decide on adapted or alternative examination arrangements.

## Course Evaluation

Course evaluation should be conducted during or shortly after the course. The results and analysis should be promptly communicated to those who have taken the course. Students participating in the next course instance should be informed of the results of the previous course evaluation and any improvements that have been made, no later than at the start of the course.

## Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course:  
4BI029 Master Course in Husbandry and Animal Welfare of Farm Animals, 15 credits  
4BI019 Master Course in Husbandry and Animal Welfare of Farm Animals, 15 credits

## Required Reading and Additional Study Material

### **Module 1: Farm animals, 12 credits**

#### ***Required reading***

Dwyer, C. (the latest edition). *The Welfare of Sheep*. Springer (available as an e-book), approx. 350 pages.

Ekesbo, I. & Gunnarsson, S. (the latest edition). *Farm animal behaviour. Characteristics for assessment of health and welfare*. CABI, approx. 340 pages.

Jensen, P. (the latest edition). *The Ethology of Domestic Animals: An Introductory Text*. CABI, approx. 350 pages.

Marchant Forde, J.N. (the latest edition). *The welfare of pigs*. Springer (available as an e-book), approx. 350 pages.

Perry, G.C. (ed.) (the latest edition). *Welfare of the laying hen*. CABI Publishing (available as an e-book), approx. 430 pages.

Phillips, C. (the latest edition). *The welfare of animals: The silent majority*. Springer (available as an e-book), approx. 230 pages.

Rushen, J., De Passillé, A. M., Weary, D. M., von Keyserlingk, M. A. G (the latest edition). *The welfare of cattle*. Springer (available as an e-book), approx. 300 pages.

Weeks, C. & Butterworth, A. (eds) (the latest edition). *Measuring and auditing broiler welfare*. CABI Publishing (available as an e-book), approx. 300 pages.

Animal welfare legislation, preparatory works, etc., and guidance and checklists issued by the Swedish Board of Agriculture for competent authorities will be added.

## **Module 2: Scientific theory and methodology, 3 credits**

### ***Required reading***

Gillies, D. (2004). Hempelian and Kuhnian approaches in the philosophy of medicine: the Semmelweis case. *Studies in History and Philosophy of Biological and Biomedical Sciences* 36: 159–181.

Mellor, D.J., Patterson Kane, E. & Stafford, K.J. (the latest edition). *The sciences of animal welfare*. Wiley-Blackwell (available as an e-book), approx. 220 pages.

Rees, PA: (the latest edition). *Studying Captive Animals: A Workbook of Methods in Behaviour, Welfare and Ecology*. Wiley, approx. 300 pages.

Nilstun, T. & Löfmark, R. (2005). Hur Semmelweis kombinerade till synes oförenliga idéer. *Läkartidningen* 102 (36): 2482-2487.

Rauw, W. M. (2015). *Philosophy and ethics of animal use and consumption: from Pythagoras to Bentham*. *CAB Reviews* 10 (016), approx. 20 pages.

Additional research articles may be included.