

3. Feeding growing pigs
4. Feeding piglets

FORMULATING SUSTAINABLE DIETS

1. Ruminant nutrition and the environment
2. Pig nutrition and the environment

Initial competences

Animal Nutrition builds on certain learning outcomes of course unit Animal Physiology; or the learning outcomes have been achieved differently.

Final competences

- 1 Having profound knowledge in determination of nutrient content and evaluation.
- 2 Animal species specific requirements and their integration in energy and protein evaluation systems are known.
- 3 Formulation of diets based on requirements according to the production stage and level.
- 4 Application of linear programming to formulate diets.
- 5 Critically evaluate current feed evaluation systems and new developments.
- 6 Profound insight in the origin of metabolic disorders and the functions of non-nutritive feed additives.
- 7 Relate nutritional composition to animal responses and vice versa.
- 8 Relate nutrition to emissions towards the environment, animal health and animal welfare and assess trade-offs .

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

Seminar, Excursion, Lecture, Independent work

Extra information on the teaching methods

Theory: oral lectures ('hoorcollege'). A part of the theory is offered via learning paths and registered knowledge clips.

Feedstuff characteristics: personal collection of data for dairy cattle & pigs ('begeleide zelfstudie') + discussion sessions & feedback on personally collected data

Exercises: practical exercise in relation to feed evaluation, calculations in relation to energy and protein evaluation system & diet formulation (personal preparation ('zelfstandig werk') - preparation of the exercises + discussion sessions ('geleide oefeningen')), practical on farm evaluation of nutrition and production characteristics + pilot compound feed installation (excursions), compound feed formulation based on linear programming ('PC-klasoefeningen'), interactive discussion on sustainable diets with stakeholders

Study material

Type: Syllabus

Name: Course notes animal nutrition including slides and text

Indicative price: Free or paid by faculty

Optional: no

Language : English

Available on Ufora : Yes

References

cfr. extensive list of references in the course material

Course content-related study coaching

During the contact hours, the different topics are discussed under supervision of the lecturer.

Exercises are prepared by the students based on guidelines provided by the lecturer. Q&A as well as feedback-discussion sessions are scheduled in association with each of the exercises.

Assessment moments

end-of-term and continuous assessment

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

Oral assessment, Written assessment with open-ended questions

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

Oral assessment, Written assessment with open-ended questions

Examination methods in case of permanent assessment

Oral assessment, Written assessment with multiple-choice questions, Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

Theory: period aligned evaluation

Exercises: non-period aligned evaluation

Possibility for period aligned evaluation of exercises (agreement between lecturer and student).

Exercises: assessment of cooperation and interaction during exercises and exercise preparation reports

Calculation of the examination mark

10/20 - non-period aligned evaluation

10/20 - period aligned evaluation