

LIVESTOCK HOUSING AND BUILDING CONCEPTION

LEVEL: MASTER 1

PERIOD: SEMESTER 2

LANGUAGE: EN

ECTS: 3

TEACHER/COORDINATOR: JOOP LENSINK



2019-2020

1-Main objectives

- › Gain knowledge and analyze the different aspects related to livestock housing influencing the animals' performances
- › Go through all steps of a project by the realization of dairy barn building project for a farmer
- › Advise farmers on building aspects and project
- › Realize a building quality audit

2-Skills developed

- › Conceptualize a cattle building project
- › Advise farmers on building aspects and project
- › Realize a building quality audit

3-General content

- › Knowledge on animal needs, human constraints, administrative and legislative aspects, environmental regulations related to livestock building
- › Future evolution in this area specifically in terms of innovation
- › A major part of the knowledge on the topic of this module will be gained through the farm building project. The first visit will concern a dairy farmer that has a construction project; either a complete new building or an extension of an existing one. Students will have to identify the wishes of the farmer, the environmental, legislative and administrative constraints and realize finally building plans and budget plans for the project. The work will be evaluated through an “advisory” report and oral defense in front of the farm and an expert from the “farm building service” of the Chamber of Agriculture.

4- Evaluation

- › Case study analysis with synthetic note to be written (20%)
- › Report on the building construction project (60%)
- › Oral presentation (45 min) by the groups of on their building project

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5- Program

Session	Duration	Topic / Method
Session 1	4h	Lecture: Introduction to livestock housing, animal behavior, basis of housing
Session 2	4h	Visit: dairy farm with construction project
Sessions 3 and 4	8h	Lecture: resting, feeding and thermal requirements
Session 5	4h	Free session: construction project
Session 6	4h	Lecture: environmental legislation, storage capacities of manure
Session 7	4h	Lecture: building concepts and automatization
Session 8	4h	Lecture: dairy calves housing and innovation
Session 9	4h	Visit: building concepts in several species
Session 10	4h	Lecture: ventilation and climate control