MODULE 12
Reproduction management
MANAGER MODULE

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During this course students will learn to not only examine reproduction in isolation, but also as part of the entire animal and its environment. They will study the anatomy and physiology, as well as the production cycle of both the male and female animal in order to ultimately manage reproduction successfully. Critical control points that will ensure the profitability of the dairy farm include routine monitoring of reproductive performance, an efficient record-keeping system and a good veterinary-client relationship. Students also need to consider how to deal with potential complications especially during gestation, calving and the post-partum period. The course will cover metabolic diseases, infectious causes of infertility, the treatment of functional infertility, repeat breeders and heat stress, which all can have a negative effect on reproduction.

It is commonly accepted that reliable detection of cows on heat (oestrus) is the single most important factor for reproductive improvement and students will learn about the various synchronisation programmes that can be used to overcome the problems and limitations associated with visual oestrus detection. Both natural breeding and artificial insemination (AI) will be discussed. The latter is more common and the dairy industry has benefited greatly from the use of AI due to the rigorous selection of the bulls. The timing of insemination as well as important guidelines to follow during AI, such as how to handle frozen semen, will also form part of the training.

NQF Level 5

📖 Knowledge
- Anatomy of the bovine reproductive system
- Basic reproductive physiology
- The production cycle of female and male dairy animals
- Bovine reproductive diseases and syndromes
- Reproduction management on dairy farms

🧩 Practical skills
- Work with the reproductive life cycles of dairy animals
- Manage reproduction-related risks (diseases and syndromes) on a dairy farm
- Manage reproduction-related activities on a dairy farm
- Manage the breeding programme on a dairy farm

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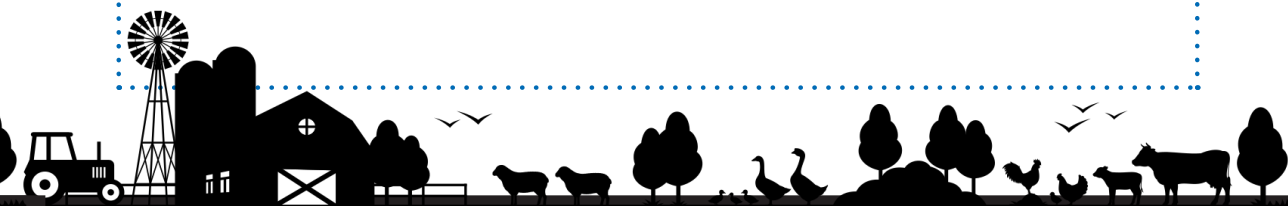
👤 Work experience

- Assist with and observe reproduction management on a dairy farm for a period of two weeks
- Perform reproduction management activities on a dairy farm under supervision for a period of a month
- Manage reproduction on a dairy farm under normal supervisory and management conditions for a period of one month

The person will be expected to engage in the following management activities and report at meetings:

- Assessment of female and male reproductive cycles
- Health risks of female and male dairy animals, including reproductive diseases and syndromes
- Keeping and interpreting of reproduction records regarding the indices of reproductive efficiency and financial impact
- Planning nutrition and culling of dairy animals in the specific herd
- Keeping, interpreting and integrating milk-recording data regarding reproduction
- Breeding methods including natural service, artificial insemination and synchronisation
- Heat detection, including accuracy, intensity and methods to improve heat detection
- Artificial insemination, including the following: factors affecting the health condition and fertility of the cow, oestrus/heat detection, and the routine monitoring of reproductive performance.