

<b>Reference Number</b>	C-S.2
<b>Module Title</b>	Reproduction, pregnancy and parturition
<b>Category and Value</b>	C – 10 credits
<b>Study Hours</b>	100

## Introduction

Candidates working towards the Certificate will need to complete the following modules: A-FAVP.1 Foundations in Advanced Veterinary Practice and B-PAP.2, preferably before undertaking this module. Completion of this module is necessary, along with the C-Sheep modules 1 and 3, for candidates aiming to achieve the Certificate in Advanced Veterinary Practice (Sheep Practice). Candidates aiming to achieve the Certificate in Advanced Veterinary Practice (Farm Animal Practice) will need to complete three C-modules from the selection of farm animal (cattle and sheep) modules, plus one other B or C module. Upon completion of all the necessary modules, a further synoptic assessment will also be required.

The focus of this module is specifically on sheep reproduction, pregnancy and parturition. The candidate is also expected to build on the foundation skills developed when undertaking the A and B modules, and to demonstrate progression towards advanced practitioner skills. The candidate will be able to evaluate their own standards of practice and develop strategies for continuous improvement in the future.

## Aims

The aims of the module are to enable the candidate to extend and consolidate clinical knowledge and skills gained at undergraduate level, to promote a scientific, evidence-based approach to sheep health and production, and to develop both practical and theoretical skills in the field.

## Learning Outcomes

At the end of this module, candidates should be able to:

1. Critically evaluate reproductive cycles of sheep, principal causes of reproductive failure, diagnosis, management and therapeutic options including intervention strategies and breeding technologies.
2. Investigate reproductive problems suspected to have nutritional cause, implement nutritional management strategies aimed at treatment and prevention of metabolic disease and critically appraise both their limitations and economic implications.
3. Critically evaluate and manage obstetrical problems in sheep.
4. Investigate mastitis by critically evaluating risk factors, and then implement preventive and management strategies in clinical cases.

5. Systematically evaluate the husbandry and management of neonatal lambs and make sound judgements on the basis of health, welfare, productivity and the safety and quality of the food produced.
6. Critically evaluate literature about ovine reproduction, pregnancy and parturition using the principles of evidence-based veterinary medicine.

## **Module Content**

### **Oestrous cycle and breeding programmes**

- Principles and understanding of the biology of oestrous cycle
- Principles and understanding of oestrous cycle and its manipulation. (Use of vasectomised rams and hormonal therapy)
- Artificial insemination and embryo transfer techniques

### **Male reproductive system**

- Clinical evaluation of the male reproductive system.
- Principles and application of diagnostic aids
- Aetiology, diagnosis, treatment and management of common infections/disorders.

### **Abortion**

- Understanding of biology/maintenance of pregnancy.
- Disease aetiology
- Differential diagnosis
- Epidemiology and risk factors
- Appropriate investigatory and diagnostic tests
- Public health implications
- Economic implications
- Management and prevention of abortion at the individual and flock level

### **Nutrition**

- Nutritional management of the ewe.
- Metabolic diseases of sheep
- Disease aetiology
- Clinical presentation
- Differential diagnosis
- Epidemiology and risk factors
- Appropriate investigatory and diagnostic tests
- Appropriate therapies
- Animal welfare implications
- Economic implications
- Management and prevention of metabolic diseases at the individual and flock level

### **Parturition**

- Understanding of the biology of parturition/neonatal adaptation, and consequences.

### **Obstetrics**

- Veterinary management of obstetrical problems (medical, surgical and anaesthetic techniques).

### **Neonatal Lamb Diseases**

Candidates will be expected to become familiar with the following categories of information for diseases occurring in the neonatal lamb

- Disease aetiology
- Clinical presentation
- Differential diagnosis
- Epidemiology and risk factors for disease
- Appropriate diagnostic techniques
- Appropriate medical and surgical therapies
- Appropriate anaesthesia and analgesia, including the common local, regional and general anaesthetic techniques/agents used in general practice
- Prognosis and outcomes
- Animal welfare implications
- Economic implications
- Public health implications
- Management and prevention of disease at the individual and flock level

### **Mastitis**

- Disease aetiology
- Clinical presentation
- Differential diagnosis
- Epidemiology and risk factors for disease
- Appropriate diagnostic techniques
- Appropriate therapies
- Prognosis and outcomes
- Animal welfare implications
- Economic implications
- Management and prevention of disease at the individual and flock level

### **Post-mortem examination**

- Post-mortem examination of sheep
- Principles of safe sample collection, storage, submission and transportation.

### **Assessment Strategy**

Module providers are responsible for deciding on assessment strategies and methods, subject to accreditation by RCVS.