



**Course Descriptor**  
**VTMD414 Veterinary Obstetrics and Theriogenology**

<b>Proposed Academic Year</b>	2021 - 2022	<b>Last Reviewed Academic Year</b>	
<b>Course Code</b>	VTMD414	<b>Course Title</b>	Veterinary Obstetrics and Theriogenology
<b>Credit hours</b>	3	<b>Level of study</b>	Undergraduate
<b>College / Centre</b>	CAHS	<b>Department</b>	VTMD
<b>Co-requisites</b>		<b>Pre-requisites</b>	VTMD324

**1. COURSE OUTLINE**

The course introduces topics on breeding soundness in male and female animals, and normal pregnancy and production. Integration of reproductive physiology, endocrinology, pathology and pharmacology as they apply to the diagnosis, treatment and prevention of reproductive disorders of domestic animals. Normal estrous cycles, breeding, pregnancy and parturition in domestic animal species will be covered.

**2. AIMS**

This course aims to provide students with a thorough understanding on basic reproduction and apply concepts useful in veterinary practice. Students will be equipped on breeding management of the male and female, pregnancy diagnosis in all species, care of pregnant animals as well as management of parturition and dystocia, and aspects of neonatal medicine. The course will also cover how to diagnose sub-fertility in male and female animal species. Students will also be introduced with advanced reproductive techniques such as preservation of semen, IVF, synchronization, embryo transfer and stem cell technologies.

**3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS**

<b>Learning Outcomes (Definitive)</b>	<b>Teaching and Learning methods (Indicative)</b>	<b>Assessment (Indicative)</b>
Upon successful completion of this course, students will be able to:		
1. Demonstrate knowledge of normal reproductive function and management of domestic species of animals of interest.	Power point presentations, discussion	Assignment, Work sheets and written examinations
2. Explain the breeding management of the male and female, pregnancy diagnosis in all species.	Power point presentations, discussion	Work sheets and written examinations
3. Describe how to take care of pregnant animals as well as management of parturition and dystocia, and aspects of neonatal medicine.	Power point presentations, discussion	Work sheets and written examinations



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4. Diagnose sub-fertility in male and female animal species.	Power point presentations, discussion	Work sheets and written examinations
Demonstrate a good understanding of advanced reproductive techniques such as preservation of semen, IVF, synchronization, embryo transfer and stem cell technologies.	Power point presentations, discussion	Work sheets and written examinations

### 4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Assignment	20%
Quizzes	20%
Mid-term Examination	20%
Final Examination	40%
<b>TOTAL</b>	<b>100%</b>

### 5. ACHIEVING A PASS

Students will achieve **3** credit hours for this course by passing **ALL** of the course assessments [*Quizzes, Mid-term, Final examination\**] and achieving a **minimum overall score of 50%**

***NB \*Ensure that ALL learning outcomes are taken into account***

### 6. COURSE CONTENT (Indicative)

Gestation and Pathology of Gestation:

- Abnormalities of development and pregnancy
- Prolapse of vagina, cervix and rectum

Obstetrics:

- Approach to an obstetrical case
- Prevalence, causes and consequences of dystocia
- Maternal dystocia: causes and treatment
- Fetal dystocia in livestock: delivery per vaginam
- Defects of presentation, position and posture in livestock; delivery by foetotomy
- Defects of presentation, position and posture in livestock; delivery by caesarean section
- Dystocia and disorders of pregnancy in horse
- Manipulative delivery per vaginam in dogs and cats
- Caesarean section in dogs and cats
- Injuries and diseases consequent upon parturition
- Castration and cryptorchid surgery



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**Subfertility:**

- Infertility in the cow due to functional and management deficiencies
- The metritis complex in cattle
- Specific infectious diseases causing infertility and subfertility in cattle
- Veterinary control of herd fertility in intensively managed dairy herds
- Veterinary control of herd fertility in pastoral dairy herds
- Veterinary control of reproduction in beef herds
- Fertility and infertility in Bos indicus
- Infertility and abortion in sheep and goats
- Management of breeding in small-scale poultry production
- Equine infertility and stud medicine practice
- Infertility in the mare
- Infertility in the bitch and queen
- Pharmacological control of reproduction in the dog and cat

**Male animal**

- Evaluation of the fertility of breeding males
- Abnormalities affecting reproductive function of male animals

**TOTAL HOURS**

**45**

Plus **RECOMMENDED INDEPENDENT STUDY HOURS**

**15**

**TOTAL COURSE HOURS**

**60**

**7. RECOMMENDED REFERENCES**

**Core text/s:**

David E. Noakes , Edited by Timothy J. Parkinson , Edited by Gary C.W. England (Editors):  
Veterinary Reproduction & Obstetrics, 10th Ed, Saunders. (2018).

**Library + online resources:**

**Open Educational Resources:**