

University: Damanhur
Department: Theriogenology



Faculty: Veterinary Medicine

Obstetrics, Artificial Insemination and Embryo Transfer Course Specifications (2012 - 2013)

Program(s) on which the course is given: BVSc
Department offering the program: ---
Department offering the course: Theriogenology
Major or Minor element of programs: Major
Academic year /Level: 5th Year 2 semesters
Date of specification approval:

A. BASIC INFORMATION

Title: Obstetrics, Artificial Insemination and Embryo Transfer Code: 2AOBS, 2BOBS

Hours:

Lectures	2 hrs/week	Practical	2 hrs/week	Total	40 hrs
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B. PROFESSIONAL INFORMATION

1. Overall aims of the course: By the end of this course, students should

- Acquire the basic knowledge and practices related to physiology and pathology of gestation, parturition and puerperium in farm and pet animals.
- Gain the skills of diagnosing and treating cases of infertility and dystocia in cattle, buffalo, sheep, goat, equine and pet animals, as well as practicing a reproductive herd health program in dairy farms.

2. Intended Learning Outcomes (ILOs) of the Course:

a. Knowledge and Understanding: On successful completion of this course, the student should be able to:

- a¹ Define the basic terms in the fields of infertility in farm and pet animals.
- a² Classify causes of dystocia in farm and pet animals,
- a³ Recognize the diagnosis and treatment of different diseases of pregnant animals,
- a⁴ Recall the herd health program of dairy farm,
- a⁵ Discuss physiology and pathology of gestation, parturition, puerperium in farm animals.

- a¹ List the causes of infertility in farm animals,
- a² Explain the faulty alignment of the fetus causing dystocia,
- a³ Describe the methods for intervention with dystocia in animals

b. Intellectual Skills: By the end of this course, the student should be able to:

- b¹ Summarize the physiology of gestation, parturition and puerperium in farm animals,
Discriminate causes and forms of infertility in farm animals,
Interpret faulty alignment as a cause of dystocia in farm and pet animals,
Select the methods of pregnancy diagnosis in farm and pet animals,
Relate between managerial and nutritional deficiencies and infertility,

Differentiate between different forms of animal infertility,

Choose appropriate treatment for dystocia and infertility according to the case and costs,
Integrate recent programs in controlling genital diseases and enhance fertility in farm and pet animals.

c. Professional and Practical Skills: By the end of this course, the student should be able to:

- c¹ Treat cases of dystocia in different animals,
- c² Apply different methods dealing with dystocia in cows,
- c³ Examine the pregnancy in farm and pet animals,
- c⁴ Diagnose the diseases of pregnancy and post-partum in farm and pet animals,
- c⁵ Treat a case of infertility in farm and pet animals,
- c⁶ Apply heat detection aids in a dairy farm,
- c⁷ Assess for fetal alignment at parturition in large and small animals.

d. General and Transferable Skills: By the end of this course, the student should be able to

- d¹ Deal ethically with faculty staff, colleagues and stakeholders.
- d² Work under adverse field environment without interruption.
- d³ Utilize the web options for a given course topic to build up a review.
- d⁴ Demonstrate the skills of communication and team-working

3. Contents:

First semester			
Topic	Total (hr)	Lectures (hr)	Practical (hr)

Course specification			
Environmental causes of infertility	4	4	-
Hormonal causes of infertility	8	8	-
Congenital causes of infertility	4	4	-
Pathological causes of infertility	4	4	-
infectious causes of infertility	4	4	-
Infertility in mare and bitch	4	4	-
Herd health programs	2	2	-
Clinical examination of the female	9	-	9
Heat detection	6	-	6
Therapeutic uses of PGF α and GnRH	3	-	3
Pregnancy diagnosis in domestic animals	9	-	9
Rectal examination of the cow and mare	18	-	18
Students activities			
- Posters illustrating some cases of normal and abnormal pregnancy and parturition.			
- Short assays.			
- Seminars & faculty campaigns			
Total	75	30	45

Second semester			
Topic	Total (hr)	Lectures (hr)	Practical (hr)
Physiology of gestation			
- Changes in genital organs during gestation	4	4	-
- Placentation and development of conceptus			
Diseases of pregnancy			
- Prolapse of vagina and uterine torsion			
- Affection of fetal membranes (hydropsy and moles) and abortion	14	4	10
- Fetal anomalies			
- intra uterine fetal death			
Normal parturition			
Normal parturition			
Normal fetal presentation, position and posture	10	4	6
Abnormal parturition			
Dystocia	12	6	6
Faulty fetal alignment and its correction and birth help.	6	2	4
Instruments	3	-	3
Cesarean section	6	2	4
Fetotomy	6	2	4
Puerperium and postpartum affections			
Physiology of puerperium	2	2	-
Postpartum affections			
- Retention of placenta			
- Prolapse of uterus	12	4	8
- Septic metritis			
Students activities			
- Posters illustrating some cases of normal and abnormal pregnancy and parturition.			
- Short assays.			
- Seminars & faculty campaigns.			
Total	75	30	45
Total of two semesters	150	60	90

ϛ. Teaching and Learning Methods:

Σ. Teaching and Learning Methods	
Lectures:	Interactive lectures through: <ul style="list-style-type: none">• Student participation in the discussions• Using electronic shows (PowerPoint slides and videos).
Practical sessions:	<ul style="list-style-type: none">• Practical lessons on faculty farm animals and faculty hospitals.• Training during veterinary campaigns and summer training.• Field visits to commercial and governmental animal production farms.
Self-Learning activities:	<ul style="list-style-type: none">• Posters and video collections illustrating some cases of normal and abnormal pregnancy and parturition.• Short reviews from the internet and the internet.• Seminars and presentations.

ο. Student Assessment Methods:

Exam		
5.1	Written Mid-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.2	Student activities	To assess the Self-Learning ability of the student
5.3	Written Final-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.4	Practical Final-term	To assess professional and practical skills
5.5	Oral Final-term	To assess skills of analysis and discussion

Assessment Schedule (in each semester):

	Exam	Week
Assessment 1	Written Mid-term	8 th
Assessment 2	Student activities	Throughout the semester
Assessment 3	Written Final-term	16 th
Assessment 4	Practical Final-term	16 th
Assessment 5	Oral Final-term	16 th

Weighing of assessments

	Exam	Per Semester (%)	Total (%)
Assessment 1	Written Mid-term	8	16
Assessment 2	Student activities	2	4
Assessment 3	Written Final-term	25	50
Assessment 4	Practical Final-term	10	20
Assessment 5	Oral Final-term	5	10
	Total	50	100

Ϟ. List of References:

Ϟ,1. Course Notes:

- Not printed

Ϟ,ϟ. Essential Book

- Hafez, E.S.E., ٢٠٠١. Reproduction in farm animals ٧th Ed. Philadelphia .USA
- Noakes, D.E., ٢٠٠٩. Veterinary reproduction and obstetrics ٩th Ed. Elsevier Publ., Philadelphia, USA.
- Robert (Veterinary Obstetrics and Genital Diseases)
- Arthur (Veterinary Reproduction and Obstetrics)
- Morrow (Current Therapy in Theriogenology)

٦,٧. Recommended Books:

- Threlfall, R, ٢٠٠٧. Current Therapy in Large Animals Theriogenology. ٣rd Ed. Elsevier Inc, USA.
- Schatten, H and Cheorgh, M ٢٠٠٧. Comparative Reproductive Biology Blackwell Publishing Professional, USA.

٦,٨. Periodicals, websites, etc

Scientific Journals

- Journal of Dairy Science
- Journal of Theriogenology

Scientific websites

- www.sciencedirect.com
- www.pubmed.com
- www.altavista.com
- WWW.IVIS.ORG

V. Facilities Required for Teaching and Learning

- Ultrasonography
- Audio-visual aids
- Learning multimedia
- Closed TV circuit
- Microscope with monitor
- Computers
- Cinema (١٧ mm.)

Course Coordinator: Prof Dr. Fekry Mohamed Hussein

Head of Department: Prof. Dr. Usama Mahros

Date: