University: south valley **Faculty: veterinary medicine**

Course Specifications

Programme(s) on which the course is given: Bachelor degree of Veterinary Science

Major or Minor element of program:

Department offering the program: Theriogenology, obstetrics and artificial insemination

Department offering the course: Theriogenology, obstetrics and artificial insemination

Academic year / Level: 5th year (second semester)

Date of specification approval: 2009 / 2010

A- Basic Information:

Title: Obstetrics in farm animals
Code: 522
Lecture: 24 **Practical: 48** **Total: 72**

B- Professional Information:

1 – Overall Aims of Course:

The graduate after finishing this course should:

1. Apply the suitable obstetrical operations that used to solve an obstetrical case in the farm animals.
2. Diagnose the post parturient problems that may affect the female farm animal during its post partum period.
3. Select the suitable treatment for any post parturient problems.
4. Have a good knowledge about the different causes of abortion in farm animals and how to control it.
5. Know the applied functional anatomy of the mammary glands in farm animals and the endocrinology of lactation especially in dairy cows.

2 – Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

Graduates must acquire the basic knowledge and understanding about:-

a1- The Pelvimetery, physiology of parturition, postpartum care of the female farm animal, postpartum care of the newly born animal.

a2- Difficult parturition “dystocia” and obstetrical operations that can be used to solve any case of dystocia.

a3- Post parturient problem that affect the female farm animals in the post parturient period.

a4- Abortion in farm animals and the methods to control abortion.

a5- Physiology of lactation and the problems of lactation especially in dairy cows.

b- Intellectual Skills:

Graduates must have the ability to:-

bl- Diagnose the different causes of dystocia and how to make correct diagnosis.

b2- Deal with different problems that may affect the female farm animal during the post parturient period.

b3- Analyze different causes of abortion in farm animals.

b4- Correct the fetal mal presentation using the suitable obstetrical operation.

b5- Deal with all problems of lactation especially in dairy cows.

c- Professional and Practical Skills:

Graduates must attain the capacity to:-

cl- Select the suitable operation to deal with an obstetrical case.

c2-Perform caesarean section and fetotomy.

c3- Diagnose the real cause of abortion and how to use the suitable decision in controlling abortion in farm animals.

c4- Treat agalactia & dysgalactia.

d- General and Transferable Skills:

Graduates must have the ability to:-

dl- Write a scientific reports about any obstetrical case.

d2- Use printable sheets to report any result.

d3- Work in groups by training of the students using group teaching .

d4- Use internet to reach scientific information by searching in scientific web sites, and to use computer for preparation of a scientific report.

d5- Deal with animal's owner using the special Arabic terms for different field cases.

3- Contents:

Theoretical parts

Contents	*No. of hours*
Obstetrical operations Mutation, fetotomy and forced traction	2
Caesarean section in cow, ewe and mare	2
Post parturient problems uterine rupture, uterine haemorrhage, rupture of the broad ligament and uterine prolapse	2
Post parturient problems which affect the birth way, injuries of the skeleton & perivaginal structures and paraplasia postpartum	2
Puerperal diseases "Retained placenta in cow, mare, ewe and bitch"	2
Puerperal infections "necrotic vaginitis & vulvitis and septic metritis"	2
Abortion in farm animals A. Abortion of cows "Bacterial & parasitic abortion including venereal disease"	2
B. Abortion of cows "viral & mycotic abortion"	2
C. Abortion of ewe, doe & mare	2
Lactation • Prenatal mammogenesis • Postnatal growth of the mammary glands	2
• Growth of the mammary gland during puberty • Development of the mammary gland during pregnancy • Milk ejection	2
• The composition of milk and colostrum • Involution of the mammary gland in dry period • Anatomical position, number & teats in mammals	2

Practical parts

Contents	*No. of hours*
• Introduction of obstetrics "Definitions" • Pelvimetery "Anatomy of the pelvic cavity"	3
• Physiology of parturition ▪ Theories of parturition ▪ Stages of normal parturition ▪ Postpartum care with the dam & the newly born	3
• Obstetrical instruments and drugs • Interference in obstetrical case	3
Revision	3
• Obstetrical operations 1. Mutation	3
2. Forced traction	3

3. Fetotomy	3
Revision	3
4. Caesarean section	3
• Post parturient problems ▪ Replacement of the uterine prolapse • Puerperal diseases ▪ Interference in retained placenta & septic metritis	3
• Lactation ▪ Normal lactation and dry period ▪ Problems of lactation "agalactia &dysgalactia"	3
General revision	3

4– Teaching and Learning Methods:

4.1- Lecturing.

4.2- Practical sessions to gain practical skills.

4.3- Discussion sessions.

4.4- Using case study to train the student how to analyze information and reach the suitable decision.

4.5- Using Data show for illustration of wide variety of cases by different scientific and clinical videos.

4.6- Using the experimental animals of the veterinary learning farm of the faculty.

5- Student Assessment Methods:

5.1 Written exam (assay). to assess a.l, a.2, a.3, a.4,a5, c1, c2, c3 & c4.

5.2 Practical exam. to assess b.1, b.2, b.3, b.4, b.5, c.1, c.2, c.3& c4.

5.3 Oral exam. to assess a.l, a.2, a.3, a.4,a5, b.1, b.2, b.3 & b.5.

5.4 Multiple choice exam. to assess b.1, b.2, b.3, b.4 & b.5.

Assessment Schedule:

Midterm exam (theoretical and practical) …. Week…..9
Final exam .....held at the end of the semester.
Practical exam..... Week.....14
Oral exam……. held at the end of the semester.

Weighting of Assessments:

Mid-Term Examination	20%
Final-term Examination	50%
Oral Examination	10%
Practical Examination	20 %
Semester Work	---%
Other types of assessment	-- %
Total	100%

Any formative only assessments

6- List of References:

6.1- Course Note

Department course notes

6.2- Essential Books (Text Books)

None

6.3- Recommended Books

1) **Hand book of veterinary obstetrics (2004).** By Peter .G.G . Jackson. Saunders Company.

2) **Current therapy in large animal Theriogenology (2007)**. By Robert S. Youngquist, Walter R. Threlfael. Saunders Company.

3) **Veterinary Reproduction and obstetrics (2008)**. By D.E. Noaks, G.H. Arthur ……..etc. Saunders Company.

4) **Fertility and obstetrics in the horses (2005)**. By Gary C. W. England. Blackwell Publishing.

5) **Controlled reproduction in cattle and buffaloes (2002)**. By Ian Gordon. CAB INTERNATIONAL

6.4- Periodicals, Web Sites,

6.4.1- Learning Reproduction in Farm Animals

URL http://animalsciences.missouri.edu/reprod/images.htm

6.4.2- Biology of reproduction

URL http://www.biolreprod.org/content/80/6/1223.full

6.4.3- Reproductive Pathology

URL http://cal.vet.upenn.edu/projects/repropath/index.html

6.4.4- The Visual guide to bovine obstetrics

URL http://www.drostproject.vetmed.ufl.edu/drost_bovine_contents.html

7- Facilities Required for Teaching and Learning:

-Appropriate teaching accommodation like teaching and laboratory rooms with its facilities like microscopes.

-Teaching aids like overhead projectors, scientific posters and newly born models, Obstetrics phantom.

-Data show for presentation of the theoretical and practical courses and viewing different clinical videos.

Course Coordinator:

(Course Professor): Dr. Mohammed Sabry Aref

Head of Department: Prof. Dr. Abd elatif Shaker Seddek

Date: 22 / 12 /2009