COURSE SPECIFICATION

(2016 / 2017)

1. Basic Information:

Code NO:

Course title: Reproduction (A &B)

Academic year/level : Fourth year of B. V. Sc. Program (Faculty bylaw,2007).

Date of specification approval: Faculty council on…../ 9 /2016.

Total teaching hours : 4 h/wk. (120 hr. / academic year)

- Lecture**: - 2h/wk. (Total= 60 hr)**

- Practical**: 2 h/wk. (Total= 60 hr)**

2- Overall aims of course:

To provide the students with basic knowledge and skills concerning basics of reproduction, programs enhancing fertility, pregnancy diagnosis and sire selection in different animal species. Also to provide them with knowledge and skills concerning the causes, diagnosis and handling of female and male infertility as well as the diseases causing abortion in farm and pet animals.

3- Intended learning outcomes of the course (ILOs):

3- A: Knowledge and understanding:

By the end of this course, students will be able to:

a.1- Recognize the age of puberty and follicular dynamics.

a.2- Identify the reproductive pattern and heat detection in farm and pet animals.

a.3- Recognize the clinical uses of reproductive hormones .

a.4- Recognize programs of enhancing fertility such as synchronization of estrous and ovulation.

a.5- Identify the use of reproductive ultrasonography.

a.6- Identify the diseases causing abortion and infertility in farm animals.

a.7- Memorize the congenital causes of infertility.

a.8- Identify the diagnosis and treatment of hormonal and environmental causes of female infertility.

a.9- Identify the diagnosis and treatment of repeat breeder and pathological causes of female infertility.

a.10- State the causes ,diagnosis and treatment of various forms of infertility in male animals.

3- B: Intellectual skills:

By the end of this course, students will be able to:

b.1- State the prophylactic measures to minimize congenital causes of infertility in male and female animals

b.2- Restate a plan for managing the fertility in dairy farms.

b.3- Gain creative thinking to control reproductive problems in male and female animals .

b.4- Distingush among infertility problems and suggest solving measures for each.

b.5- Interpret the results of breeding soundness examinations in male.

3- C: Professional and practical skills:

By the end of this course, students will be able to

c.1- Organize heat detection regimes in dairy herds.

c.2- Apply the ultrasonography in the diagnosis of pregnancy and infertility problems.

c.3- Apply reproductive herd health programs on farm basis and evaluate reproductive performance.

c.4- Make gynecological examinations in females and breeding soundness examinations in males..

c.5- Solve the problems caused by diseases causing abortion in a herd.

c.6- Apply the basics of sire selection.

3- D: General and transferable skills:

By the end of this course, students will be able to

d.1- Conduct good communications and perform group working.

d.2- Use new technology in dealing with problems.

d.3- Classify different duties.

d.4- Develop the ethical behaviors between students and staff members as well as among the students themselves.

3. COURSE CONTENTS:

3. A: First semester topics (Gynecol. & AI; A) and intended learning outcomes of each topic:

TOPIC	No. of hours (weeks)		Total hours (Semester)	Hours for lecture	Hours for practical
	Lect.	Pract.			
Age of puberty and follicular dynamics	2	-	4	4	-
Reproductive patterns and	2	2	6	4	2
clinical uses of reproductive hormones	2	2	6	4	2
Synchronization of estrous	2	2	6	4	2
Synchronization of ovulation	2	2	6	4	2
Diseases causing abortion .	2	-	12	8	4
Heat detection	-	2	4	-	4
Gynecological examination	-	2	16	2	14
Total			60	30	30

3.B: Second semester topics(Gynecol. & AI; B) and intended learning outcomes of each topic:

TOPIC	No. of hours per week		Total hours (Semester)	Hours for lecture	Hours for practical
	Lect.	Pract.			
Congenital causes of infertility	2	-	4	4	-
Hormonal causes of infertility	2	2	8	6	2
pathological causes of infertility	2	2	8	6	2

TOPIC	No. of hours per week		Total hours (Semester)	Hours for lecture	Hours for practical
	Lect.	Pract.			
Environmental causes of infertility	2	2	4	4	-
Repeat breeder	2	2	4	2	2
Forms of infertility in males	2	2	12	8	4
Pregnancy diagnosis	-	2	16	-	16
Sire selection	-	2	4	-	4
Total			60	30	30

4- TEACHING & LEARNING METHODS:

5- TEACHING & LEARNING METHODS:

* Lectures:

- using data- show, white board and brain storming.

* Practical

- Study of clinical cases in faculty clinic and summer training.

- Practical demonstrations on slaughter material(genitalia) through palpation in the phantoms.

- Audiovisual.

* Self learning

- **Visits to faculty library to prepare:**

    - Internet researches.

    - Eessays and presentations.

6. METHODS FOR DISABLED STUDENTS:

- Activation of office hours.

- Discussion with them during practical sessions.

7. STUDENT ASSESSMENT:

Method of assessment	Written Examination	Oral Examination	Pract. Examination	Activities
Timing	At the end of each semester	At the end of each semester	at 13th week of each semester	at 5th week of each semester
grads	50	20	20	10

8- List of references:

8.1. Course notes: (edited by the staff members)

8.1.1. Gynecology and Andrology (Theoretical part)

8.1.2. Practical Theriogenology.

8.2. Essential books (text books)

- Applied animal reproduction, H.J. Bearden

- Fertility and infertility in domestic animals, J.A. Laing..

8.3. Recommended books

- Veterinary Reproduction and Obstetrics, 7th Ed. by Arthur G.H., et al. (1996).

- Veterinary Obstetrics and Genital diseases, 3rd Ed. by Robert, G.R. (1986).

- Current Therapy in Theriogenology, 1st Ed. by Morrow D.A. (1986).

- Current Therapy in Large animal Theriogenology, 2nd ed., by Youngquist R.S. (2007).

8.3. Periodicals, Web sites,….. etc

- J. of Animal Reproduction Science.

- J. of Theriogenology.

- Google. Com.

Course contents Ilos matrix

TOPIC	K.U (a)	I.S (b)	P.P.S (c)	G.T.S (d)	T&L. methods			
					Lect.	Pract.	Self leaning	Audio-visual
1st Semister								
Age of puberty and follicular dynamics	a.1	b1to b5	-	d1to d4	✓			
Reproductive patterns and	a.2	b1to b5	c1, c3& c4	d1to d4	✓	✓		✓
Clinical uses of reproductive hormones	a3	b1to b5	c1& c3	d1to d4	✓	✓		
Synchronization of estrous	a.4	b1to b5	c3	d1to d4	✓	✓		✓
Diseases causing abortion .	a.5	b1to b5	c2, c4& c5	d1to d4	✓		✓	✓
Heat detection	-	b1to b5	c1	d1to d4		✓		✓
Gynecological examination	-	b1to b5	c4	d1to d4	-	✓	-	✓
2nd Semister								
Congenital causes of infertility	a7	b1to b5	c2 & c4	d1to d4	√	√	√	√
Hormonal causes of infertility	a8	b1to b5	c2& c4	d1to d4	√	√	√	√
pathological causes of infertility	a9	b1to b5	c2& c4	d1to d4	√	√	√	√
Environmental causes of infertility	a8	b1to b5	-	d1to d4	√		√	√
Repeat breeder	a9	b1to b5	c2& c4	d1to d4	√	√	√	√
Forms of infertility in males	a.10	b1to b5	c4	d1to d4	√	√	√	√

Pregnancy diagnosis	-	b1to b5	c2	d1to d4		√		√
Sire selection	-	b1to b5	C6	d1to d4		√		√

Assessment ILOs Matrix:

Methods	I.L.O.S Evaluation				Marks allocated
	Knowledge	Intellectual	Practical	general	
Written examination	a1, a2, a3, a4, a5, a6, a 7, a8, a9 & a10	b1 to b5		d1 to d4	50
Oral examination	a1, a2, a3, a4, a5, a6, a 7, a8, a9 & a10	b1 to b5		d1 to d4	20
Practical examination		b1 to b5	c1 to c6	d1 to d4	20
Activities	A1-a2-a7-a8	b1 to b5		d1 to d4	10

Course Coordinator   **Head of Department**

Prof. Dr. basioni Helyl   **Prof. Dr. Adel A. Ramoun**