

Specification for Reproduction and infertility course 2019/2020

A-Affiliation

1.	Relevant program	Bachelor of Veterinary Medical Science (BVMSc)
2.	Department offering the course	Theriogenology

Date of specification approval: ministerial decree No. 1727 on 26/4/2017
(Approved in this template by the department council on 1/10/2019)

B-Basic information

1.	Course title	Reproduction and infertility
2.	Course code	403 (A) I
3.	Level	4 th year
4.	Semester	First semester
5.	Total hours	5
6.	Lecture hours	2
7.	Practical hours	3

C-Professional Information

1- Course learning objectives

The course aims to identify the female physiological norms, eliminate the infertility problems and to manipulate the female reproductive management.

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

a- Knowledge and understanding

After successful completion of the course the students should be able to:

- a1-Identify all clinical examination of female reproductive system.
- a2-Familiarize with all tools used for the diagnosis and treatment of infertility problems.
- a3- Enumerate all methods used for assessment of fertility and the conception rate

b- Intellectual skills

After successful completion of the course the students should be able to:

- b1-Operate all clinical practice in farm animals.
- b2 manipulation and treatment of infertility problems.
- b3-Schedule the breeding soundness

c- Professional and practical skills

After successful completion of the course the students should be able to:

- c1- manipulate with the female genital system clinically.
- c2- control an infertility problem at an early stage.
- c3- Evaluate and maximize the female reproductive potential

d- General and transferable skills

After successful completion of the course the students should have the following skills

- d1- Searching skills
- d2- Communication skills
- d3- Problem solving skills
- d4- Working in a team work

3- Course contribution in the program ILOs:

Course ILOS	Program ILOS
A Knowledge and understanding	a ¹⁰
B Intellectual skills	b ⁹
C Professional and practical skills	c ^{7,9}
D General and transferable skills	d ^{1,2,3,5,6}

3.1- Course contents:

Topic	Lecture hours	Practical hours
Hormonal control of reproduction	4	-
Puberty and sexual maturity	4	-
Estrous cycle, ovulation & fertilization	4	-
Infertility in cattle	4	-
Infertility in equine	4	-
Estrous detection & synchronization	6	-
Records & Recording systems	4	-
Scheme of gynecological examination	-	6
Physical exam of non-pregnant animal	-	6
Rectal exam of non-pregnant case	-	6
Vaginal exam. of non-pregnant case	-	6
Ultrasound exam of non-pregnant case	-	3
Diagnosis of pregnancy by rectal	-	6
Diagnosis of pregnancy by ultrasound	-	6
Diagnosis of pregnancy by lab. tests	-	6
Total	30	45

The midterm and practical exams are included during the semester

3.2- ILOs matrix:

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
Hormonal control of reproduction	a1, a2	b1, b2,b3	c1, c2 , c3	d1, d2,
Puberty and sexual maturity	a1, a3	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Estrous cycle,		b1, b2,b3	c1, c2 , c3	d1, d4

ovulation & fertilization	a1, a2, a3			
Infertility in cattle	a1, a2, a3	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Infertility in equine	a1, a3	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Estrous detection & synchronization	a1, a2	b1,b3	c1, c2 , c3	d1, d2
Records & Recording systems	a1, a2, a3	b1, b2,b3	c1, c2 , c3	d3,d4
Scheme of gynecological examination	a1, a2, a3	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Physical exam of non-pregnant animal	a1, a2, a3	b1, b2,b3	c1, c2 , c3	d1, d2
Rectal exam of non-pregnant case	a1, a2, a3	b1, b2,b3	c1, c2 , c3	
Vaginal exam. of non-pregnant case	a1, a2, a3	b1, b2,b3	c1, c2 , c3	
Ultrasound exam of non-pregnant case		b1, b2,b3	c1, c2 , c3	
Diagnosis of pregnancy by rectal		b1, b2,b3	c1, c2 , c3	
Diagnosis of pregnancy by ultrasound		b1, b2,b3	c1, c2 , c3	
Diagnosis of pregnancy by lab. tests			c1, c2 , c3	

4- Teaching, learning and assessment methods:

ILOs	Teaching and Learning methods								assessment method				
	L	P&M	D	P	Ps	Bs	Ft	semester	midterm	oral	practical	written	
Intelligence and understanding	a1	x	x	x	0		x	0	x	x	x	0	x
	a2	x	x	x	0		x	0	x	x	x	0	x
	a3	x	x	x	0		x	0	x	x	x	0	x
Intelligence and practical skills	b1	x	x	x	0	x	x	x	x	x	x	0	x
	b2	x	x	x	0	x	x	x	x	x	x	0	x
	b3	x	x	x	0	x	x	x	x	x	x	0	x
General practical skills	c1	0	x	x	x	x	0	x	x	0	x	x	0
	c2	0	x	x	x	x	0	x	x	0	x	x	0
	c3	0	x	x	x	x	0	x	x	0	x	x	0
General skills	d1	0	x	x	0	x	x	x	x	0	x		x
	d2	x	x	0	x		0	x	x	0	x	x	0
	d3	0	0	x	0	x	0	x	x	0	x	x	x
	d4	0	0	0	x		0	x	x	0	x	0	0

L :Lecture, P&M: Presentations & Movies, D&S: Discussions & Seminars PT: Practical, Ps: Problem solving, Bs: Brain storming Ft: field trip

5- Assessment timing and grading:

Assessment method	timing	grade
Mid-term exam and semester work	6 th week	15
Practical exam	14 th week	20
oral exam	End of semester	15
Written exam	End of semester	50
total		100

6- List of references

6.1- Course notes:

Veterinary Gynecology edited by the staff members

6.2- Essential books (text books)

- John Dascanio (2014) Equine Reproductive procedures.
- Wolfgang Jochle (2010) Control of Reproductive Functions in Domestic Animals
- David E. Noakes (2009) veterinary reproduction and obstetrics

6.3- Recommended books

- Course notes.
- David E. Noakes (2009) veterinary reproduction and obstetrics.
- Current therapy in theriogenology, D.A. Morrow

6.4- Periodicals, Web sites, . . . etc

- J. Animal reproduction & Fertility.
- J. Fertility & Sterility.
- www.arabvet.com
- www.ekb.eg

7- Facilities required for teaching and learning

- Equipped teaching hall.
- Equipped Laboratory.
- Faculty teaching farm
- Faculty teaching hospital

Course coordinator: Prof Dr. MAHMOUD ABED ABOU EL- ROOS

Head of department Prof Dr. GAMAL A. SOSA

Signature

Date 1/10/2019