

## Specification for Obstetrics course 2025/2026

### 1-Basic information

1.	Course title	Theriogenology (Obstetrics)							
2.	Course code	502 (A) III							
3.	Department offering the course	Theriogenology							
4.	Number of hours	Theoretical	2	Practical	3	Other	0	Total	5
5.	Course Type	√ <b>Obligatory</b> <b>Elective</b>							
6.	Level	5 <sup>th</sup> year							
7.	Semester	First semester							
8.	Academic program	Bachelor Veterinary medicine (BVM)							
9.	Faculty	Faculty of Veterinary medicine							
10.	University	Benha University							
11.	Name of course coordinator	Prof. dr. Mahmoud Abouelroos							
12.	Course Specification Approval Date	Faculty council/ 27-8-2025							
13.	Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)	Department council/							

### 2-Course overview

- Course contents written in the program bylaw:  
Physiology of pregnancy, pathology of pregnancy, normal parturition, dystocia, normal puerperium, abnormal puerperium, scheme of obstetrical exam, tools and equipments, exam of normal parturient case, examination of dystocia and maneuvers in case of dystocia.

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

	(NARS) outcomes		Course outcomes	
	Code	Text	Code	Text
<b>Knowledge and understanding</b>	2.10	Toxicology and forensic medicine, animal medicine, theriogenology and veterinary surgery.	a1	Conduct clinical examination and handling of an obstetrical case.
			a2	Follow the pathway of pregnant, parturition and puerperium
			a3	Plan policy of the future breeding,

				replacing or culling
<b>Intellectual skills</b>	<b>4.3</b>	Inculcate a rigorous approach to problem identification and solving.	<b>b1</b>	Acquire good obstetrical approach
			<b>b2</b>	Analyze an obstetrics problems
	<b>4.5.</b>	Remain committed to life – long learning and updating / upgrading their biochemical sense and clinical skills.	<b>b3</b>	Compare between different methods of breeding policy
<b>Practical skills</b>	<b>3.2.</b>	Safely, correctly and humanely restrain animals for examination.	<b>c1</b>	Carry out and handle a female in an obstetrical condition
	<b>3.7</b>	Assess and advise about animal management, nutrition under conditions of health and disease, and reproductive efficiency	<b>c3</b>	Maintain the female reproductive potential
	<b>3.8.</b>	Skillfully and appropriately gain and use new information remain current with the emerging biomedical knowledge and therapeutic options.	<b>c2</b>	Evaluate and save the dam and offspring from danger
	<b>3.9.</b>	Conduct evidence-based problem-solving of field–presented problems tasks.	<b>c3</b>	Maintain the female reproductive potential
<b>Transferable skills</b>	<b>5.1</b>	Work under pressure and / or contradictory conditions	<b>d1</b>	Work under pressure during lab sessions.
	<b>5.2</b>	Function in a multidisciplinary team	<b>d2</b>	Work in a team during the diagnosis process.
	<b>5.3</b>	Communicate appropriately verbally and nonverbally	<b>d3</b>	Cooperate with other veterinary hospitals, clinics and units in the field.
	<b>5.5</b>	Search for new information and technology as well as adopt life–long self learning ethics	<b>d4</b>	Searching skill and Self-learning during lecture related to his research project.

#### 4- Teaching and learning methods

<b>Lectures</b>	√	<b>Discussion &amp; seminar (self-learning)</b>	√	<b>Practical</b>	√
<b>Presentation &amp; movies</b>	√	<b>Problem solving</b>	√	<b>Brain storming</b>	√
<b>Others</b>	<b>Field training</b>				

**- Course contents:**

Number of the Week	Scientific content of the course (Course Topics)	Expected number of the Learning Hours				
		Total Weekly hours	Theoretical teaching (lectures/disc ussion groups/ .....)	Training (Practical/ Clinical/ .....)	Self-learning (Tasks/ Assignments/ Projects/ ...)	Other
W1	Physiology of pregnancy 1	5	2	0		0
	Scheme of obstetrical exam		0	3		0
W2	Physiology of pregnancy 2	5	2	0		0
	Scheme of obstetrical exam		0	3		0
W3	Physiology of pregnancy 3	5	2	0	Formative quiz(self- learning)	0
	Scheme of obstetrical exam		0	3		0
W4	Physiology of pregnancy 4	5	2	0		0
	Scheme of obstetrical exam		0	3		0
W5	Pathology of pregnancy 1	5	2	0		0
	Tools & equipments 1		0	3		0
W6	Pathology of pregnancy 2	5	2	0	Formative quiz(self- learning)	0
	Tools & equipments 2		0	3		0
W7	Semester works and Mid-term exam					
W8	Pathology of pregnancy 3	5	2	0		0
	Tools & equipments 3		0	3		0
W9	Normal parturition 1	5	2	0		0
	Exam of normal parturient case 1		0	3		0

W10	Normal parturition 2	5	2	0	Formative quiz(self-learning)	0
	Exam of normal parturient case 2		0	3		0
W11	Dystocia 1	5	2	0		0
	Exam of normal parturient case 3		0	3		0
W12	Dystocia 2	5	2	0		0
	Exam of dystocian case		0	3		0
W13	Normal puerperium	5	2	0	Formative quiz(self-learning)	0
	Exam of dystocian case		0	3		0
W14	Abnormal puerperium	5	2	0		0
	Maneuvers in case of dystocia		0	3		0
W15	Practical exam					

## 5- Assessment timing and grading:

### a- Assessment methods (summative and formative)

1. **Formative assessment:** including (weekly quizzes, homework assignments and surveys).
2. **Summative assessment** including (quizzes, class activates, Mid-term exam, practical exam, oral exams and final written exams).

### b- Assessment schedule and weight

Assessment method	Timing	Grade	Percent
<b>Mid-term exam</b>	7 <sup>th</sup> week	15	15%
<b>Formative assessment</b>	Throughout semester	-	-
<b>Practical exam</b>	15 <sup>th</sup> week	20	20%
<b>oral exam</b>	End of semester	15	15%
<b>Written exam</b>	End of semester	50	50%
<b>Total</b>		100	100

## 6- Learning resources and supportive facilities:

Learning resources	Main reference	Student handbook
		<ul style="list-style-type: none"> <li>• John Dascanio (2014) Equine Reproductive procedures.</li> </ul>

	<b>Essential books (text books)</b>	<ul style="list-style-type: none"> <li>• Wolfgang Jochle (2010) Control of Reproductive Functions in Domestic Animals</li> <li>• David E. Noakes (2009) veterinary reproduction and obstetrics</li> <li>• Current therapy in theriogenology, D.A. Morrow</li> </ul>
	<b>Periodicals, Web sites, . . . etc</b>	<ul style="list-style-type: none"> <li>• J. Animal reproduction &amp; Fertility.</li> <li>• J. Fertility &amp; Sterility.</li> <li>• www.arabvet.com</li> <li>• www.ekb.eg</li> </ul>
	<b>Learning platform</b>	Thinqi
<b>Supportive Facilities</b>	<b>Devices &amp; instruments</b>	As listing in device guideline
		<ul style="list-style-type: none"> <li>• Equipped teaching hall.</li> <li>• Equipped Laboratory.</li> <li>• Faculty teaching farm</li> <li>• Faculty teaching hospital</li> </ul>

### Matrices:

#### **A- Content and ILOs matrix:**

<b>Topic</b>	<b>A) Knowledge and understanding</b>	<b>B) Intellectual skills</b>	<b>C) Professional and practical skills</b>	<b>D) General and transferable skills</b>
Hormonal control of reproduction	<b>a1, a2</b>	<b>b1, b2,b3</b>	<b>c1, c2 , c3</b>	<b>d1, d2,</b>
Puberty and sexual maturity	<b>a1, a3</b>	<b>b1, b2,b3</b>	<b>c1, c2 , c3</b>	<b>d1, d2,</b>
Estrous cycle, ovulation & fertilization	<b>a1, a3</b>	<b>b1, ,b3,</b>	<b>c1, c2 , c3</b>	<b>d1</b>
Infertility in cattle	<b>a1, a2, a3</b>	<b>b1, b3</b>	<b>c1, c2 , c3</b>	<b>d3,d4</b>
Infertility in equine	<b>a1, a3</b>	<b>b1, b2</b>	<b>c1, c2 , c3</b>	<b>d3,d4</b>
Estrous detection & synchronization	<b>a1, a2</b>	<b>b1,b3</b>	<b>c1, c2 , c3</b>	<b>d1, d2</b>
Records & Recording systems	<b>a1, a2</b>	<b>b1, b2,b3</b>	<b>c1, c2 , c3</b>	<b>d1, d2,</b>
Scheme of gynecological examination	<b>a1, a3</b>	<b>b1, b2,b3</b>	<b>c1, c2 , c3</b>	<b>d1, d2,</b>
Physical exam of		<b>b1, b2,b3,</b>	<b>c1, c2 , c3</b>	<b>d1, d3,d4</b>

non-pregnant animal	a1, a2, a3			
Rectal exam of non-pregnant case	a1, a2, a3	b1, b2,b3	c1, c2 , c3	d3,d4
Vaginal exam. of non-pregnant case	a1, a3	b1, b2,b3	c1, c2 , c3	d3,d4
Ultrasound exam of non-pregnant case	a1, a2	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Diagnosis of pregnancy by rectal	a1, a3	b1, b2,b3	c1, c2 , c3	d1, d2, d3,d4
Diagnosis of pregnancy by ultrasound	a1, a3	b1, ,b3,	c1, c2 , c3	d1
Diagnosis of pregnancy by lab. tests	a1, a2, a3	b1, b3	c1, c2 , c3	d3,d4

### B- Teaching and learning methods and ILOs matrix:

Course ILOs		Teaching and Learning methods						
		L	P&M	D&S	P(TPL)	Ps	Bs	FTP
Knowledge & understanding	a1	√	√	√			√	
	a2	√	√	√			√	
	a3	√	√	√			√	
Intellectual skills	b1	√	√	√		√	√	√
	b2	√	√	√		√	√	√
	b3	√	√	√		√	√	√
Professional and practical skills	c1		√	√	√	√		√
	c2		√	√	√	√		√
	c3		√	√	√	√		√
General skills	d1	√		√		√		√
	d2	√		√	√			√
	d3			√	√			√
	d4		√	√				√

**L:** Lecture, **P&M:** Presentations & Movies, **D&S:** Discussions & Seminars (self-learning), **P(TPL):** Practical, **Ps:** Problem solving, **Bs:** Brain storming, **FTP:** field trip, Training, Project

### C- Assessment methods and ILOs matrix:

Course ILOs		Assessment method				
		Formative assessment	Mid-term exam	Oral	Practical	Written
Knowledge & understanding	a1	√	√	√		√
	a2	√	√	√		√

	a3	√	√	√	√
Intellectual skills	b1	√	√	√	√
	b2	√	√	√	√
	b3	√	√	√	√
Professional and practical skills	c1	√		√	
	c2	√		√	
	c3	√		√	
General skills	d1	√			
	d2	√			
	d3	√		√	
	d4	√			

Name and Signature  
Course Coordinator

Prof. Dr. Mahmoud Abouelroos

Name and Signature  
Program Coordinator

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