Specification for anatomy B
2025/2026

1-Basic information

1.	**Course title**	Anatomy (B)							
2.	**Course code**	**ANE-133**							
3.	**Department offering the course**	Anatomy and embryology							
4.	**Number of hours**	**Theoretical**	1	Practical	1(2)	Other	0	Total	2(3)
5.	**Course Type**	√ **Obligatory** **Elective**							
6.	**Level**	1st year							
7.	**Semester**	Spring semester							
8.	**Academic program**	Bachelor of Veterinary Medicine (BVM)							
9.	**Faculty**	Faculty of Veterinary medicine							
10.	**University**	Benha University							
11.	**Name of course coordinator**	Prof. dr. Ahmed Abdel-Rahman Kassab							
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/ 8/7/2025							

2-Course overview

- **Course contents written in the program bylaw:**
- Male gentile system, female gentile system, general embryology, bones of the pelvic limb, dissection of the pelvic limb of horse, special arthrology of pelvic limb of horse and hoof anatomy.

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

	NARS		**Course ILOS**	
	Code	**Content**	**Code**	**Content**
		Basic sciences of biology, chemistry, biophysics,	a1	Identify knowledge about the anatomy of the male

Knowledge and understanding	2.3	genetics, biostatics, computer science and veterinary terminology.		and female genital systems of different farm animals.
			a2	Identify a concise knowledge about embryology.
			a3	Describe the anatomical features and the position of the male and female genital systems for the different domestic animals.
			a4	Identify the principles of the comparative anatomy for the bones, joints and muscles of the pelvic limb.
			a5	Identify a concise knowledge about hoof.
Intellectual skills	4.1	Foster critical thinking and scientific curiosity.	b1	Determine the different bone types of the different animal species in addition to the joints of pelvic limb in equines.
			b2	Determine the sites of the different peripheral nerves and its branches
			b3	Determine the origin and insertion of different skeletal muscles of the pelvic limb.
			b4	Determine the basis of embryology and the primordial origin of the different body systems and organs.
			b5	Compare between the different organs of male and female genital system in different animals.
			b6	Illustrate the anatomy of the hoof.

Professional and practical skills	3.1	Employ all the gained knowledge and understanding in clinical practice in a skillful pattern.	c1	Dissect the pelvic limb.
			c2	Demonstrate the shape and position of the pelvic limb bones for the different domestic animals and hoof anatomy.
			c3	Explore comparison between the pelvic limb bones and joints for the different domestic animals.
			c4	Explore the skills of the comparative dissection for male and female genital systems of the different animal species.
			c5	Explore the skills for determination of the primordial origin of the different body systems and organs.
General and transferable skills	5.1	Work under pressure and / or contradictory conditions.	d1	Work under pressure during anatomical lab cession
	5.2	Function in a multidisciplinary team.	d2	Self-learning during anatomy lecture
	5.5	Search for new information and technology as well as adopting life–long self-learning.	d3	Search for new information about Veterinary anatomy.
	5.6	Utilize computer and internet skills.	d4	Utilize computer and internet skills, read paper via internet about Veterinary anatomy.

4- Teaching and learning methods					
Lectures	√	**Discussion & seminar**	√	**Practical**	√
Presentation & movies	√	**Problem solving**	√	**Brain storming**	√
Others	Simulation & Role play				

- 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/discussion groups/ .....)	Training (Practical/ Clinical/ .....)	Self-learning (Tasks/ Assignments/ Projects/ ...)	Other
W1	Male genital system1	**2(3)**	**2**	**0**		**0**
	Bones of the pelvic limb		**0**	**1(2)**		
W2	Male genital system2	**2(3)**	**2**	**0**		**0**
	Bones of the pelvic limb		**0**	**1(2)**		
W3	Male genital system3	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Bones of the pelvic limb		**0**	**1(2)**		
W4	Male genital system4	**2(3)**	**2**	**0**		**0**
	Hoof anatomy		**0**	**1(2)**		
W5	Female genital system1	**2(3)**	**2**	**0**		**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W6	Female genital system2	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W7	Semester work (one hour exam)	----------				
W8	Female genital system3	**2(3)**	**2**	**0**		**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W9	Female genital system4	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W10	General Embryology1	**2(3)**	**2**	**0**		**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W11	General Embryology2	**2(3)**	**2**	**0**		**0**
	Dissection of the pelvic limb of horse		**0**	**1(2)**		
W12	General Embryology3	**2(3)**	**2**	**0**	**Formative**	**0**

	Dissection of the pelvic limb of horse		**0**	**1(2)**	**quiz**	
W13	General Embryology4	**2(3)**	**2**	**0**		**0**
	Special Arthrology of pelvic limb of horse		**0**	**1(2)**		
W14	General Embryology5	**2(3)**	**2**	**0**		**0**
	Comparative organs		**0**	**1(2)**		
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 activities, semester work, practical exam, oral exams and final written exams).

b- Assessment schedule and weight

Assessment method	Timing	Grade	Percent
Semester work including one hour exam	7th week	10	10%
Formative assessment	Through semester	---------	----------
Practical exam	15th week	30	30%
oral exam	End of semester	10	10%
Written exam	End of semester	50	50%
Total		100	100%

6- Learning resources and supportive facilities:

- Learning resources	**Main reference**	**Student handbook**: Male genital system, Female genital system, General embryology, Dissection of the pelvic limb
	Essential books (text books)	• H.E. Konig & H. G. Liebich (2020) veterinary anatomy of domestic mammals text book and colour atlas 7th Edition. • Dyce, Sack and Wensing's (2018) Textbook of Veterinary Anatomy fifth edition. • Klaus-Dieter Budras (2011) Bovine Anatomy • G. E. Abdelhakim (2009) Atlas Anatomy of The Horse • K.S. Roy (2009) foundation of veterinary embryology

		• Thomas O. Mccracken (2008) color atlas of small animal anatomy: the essentials • Course note • Klaus-Dieter Budras (2011) Bovine Anatomy • Thomas O. Mccracken (2008) color atlas of small animal anatomy: the essentials.
	Periodicals, Web sites, . . . etc	• Acta Anatomica. • Equine Veterinary journal • American Journal of Veterinary Anatomy • American Journal of Veterinary Research • Veterinary Record • www.ekb.eg •
	Learning platform	Thinqi
supportive facilities	**Devices & instruments**	1. Data show 2. White board 3. Anatomy laboratory 4. Phantoms and models for different organs and bones 5. Carcasses for dissection and demonstration 6. Anatomy museum or anatomy skill lab. 7. Stereo Microscope 8. Light Microscope

Matrices:

A- Content and ILOs matrix:

B- Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
Male genital system	a1, a3	b5	c4	d1,d2,d3,d4
Female genital system	a1, a3	b5	c4	d1,d2,d3,d4
General Embryology	a2	b4	c5	d1,d2,d3,d4
Bones of the pelvic limb	a4	b1	c2,c3	d1,d2,d3,d4
Dissection of the pelvic limb of	a4	b2,b3	c1	d1,d2,d3,d4

horse				
Special Arthrology of pelvic limb of horse	a4	b1	c3	d1,d2,d3,d4
Hoof Anatomy	a5	b6	c2	d1,d2,d3,d4

B- Teaching and learning methods:

ILOs		Teaching and Learning method							
		L	P&M	D&S	P	Ps	Bs	S	Rp
and	a1	√		√		√		√	√
	a2	√		√		√		√	√
	a3	√		√		√		√	√
	a4	√		√		√		√	
	a5	√		√		√		√	√
Intellectual skills	b1	√		√				√	√
	b2	√		√				√	
	b3	√		√				√	
	b4	√	√	√				√	
	b5	√	√	√				√	√
	b6	√	√	√				√	√
and practical	c1				√				√
	c2				√				√
	c3				√				√
	c4				√				√
	c5				√				√
General skills	d1			√				√	
	d2	√		√		√		√	√
	d3								√
	d4					√	√	√	

L**: Lecture,** P&M**: Presentations & Movies,** D&S: **Discussions & Seminars P: Practical** Ps: **Problem solving,** Bs: **Brain storming** S: **simulation Rp: role play**

C- Assessment methods and ILOs matrix:

ILOs		assessment method				
		Formative assessment	Semester work (1 hr exam)	oral	Practical	written

Knowledge and understanding	a1		√	√		√
	a2		√	√		√
	a3		√	√		√
	a4		√	√		√
	a5		√	√		√
Intellectual skills	b1	√	√	√		√
	b2	√	√	√		√
	b3	√	√	√		√
	b4	√	√	√		√
	b5	√	√			√
	b6	√				
Professional and practical skills	c1				√	
	c2				√	
	c3				√	
	c4				√	
	c5				√	
General skills	d1	√		√		
	d2	√		√		
	d3	√		√		
	d4	√				

-Course coordinator:

Prof. Dr. Ahmed Abdel-Rahman Kassab

Program coordinator: Prof. Dr. Mahmoud Abouelroos