Specification for Anatomy (A)
2025/2026

1-Basic information

1.	**Course title**	**Anatomy (A)**							
2.	**Course code**	**ANE-114**							
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**	Fall 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:**

Introduction of general anatomy, topographic anatomy in animals.

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

	NARS		**Course ILOS**	
	Code	**Content**	**Code**	**Content**
			a1	Identify knowledge about the anatomy on the standards model
			a2	Identify the basic knowledge of fish and avian anatomy

Knowledge and understanding	2.3	Basic sciences of biology, chemistry, biophysics, genetics, biostatics, computer science and veterinary terminology.	a3	Describe the general anatomy of Osteology, Arthrology, Myology, cardiovascular system and neurology of equines
			a4	Identify a comprehensive knowledge about urinary system anatomy
			a5	Define the principles of the comparative anatomy for the bones, joints and muscles of the thoracic limb
Intellectual skills	4.1	Foster critical thinking and scientific curiosity	b1	Distinguish the general Osteology, Arthrology, Myology and neurology of equines and the comparative anatomy of the other different domestic farm animal species
			b2	Choose the best steps for the avian and fish dissection
			b3	Differentiate the bones of the thoracic limb for the all animal species in addition to the joints of forelimb in equines
			b4	Distinguish the site of origin of the different peripheral nerves
			b5	Detect the origin and insertion of different skeletal muscles
			b6	Compare between the different organs of urinary system in different
Professional and practical	3.1	Employ all the gained knowledge and understanding in clinical practice in a skillful	c1	Dissect the thoracic limb

skills		pattern.	c2	Demonstrate the shape and position of the thoracic limb bones
			c3	Explore comparison between bones and joints of the thoracic limb of different domestic animals
			c4	Explore comparison between organs of urinary, cardiovascular, nervous systems of different domestic animals beside avian and fish anatomy
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**	**Training (Practical/ Clinical/**	**Self-learning (Tasks/ Assignments/**	**Other**

			groups/ .....)	.....)	Projects/ ...)	
W1	Introduction	**2(3)**	**2**	**0**		**0**
	Bones of the thoracic limb		**0**	**1(2)**		
W2	General Osteology	**2(3)**	**2**	**0**		**0**
	Bones of the thoracic limb		**0**	**1(2)**		
W3	General Arthrology (syndesmology)	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Bones of the thoracic limb		**0**	**1(2)**		
W4	General Myology	**2(3)**	**2**	**0**		**0**
	Bones of the thoracic limb		**0**	**1(2)**		
W5	General Nervous System	**2(3)**	**2**	**0**		**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W6	General Cardiovascular System	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W7	Semester work (one hour exam)	----------				
W8	Urinary system 1	**2(3)**	**2**	**0**		**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W9	Urinary system 2	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W10	Urinary system3	**2(3)**	**2**	**0**		**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W11	Avian anatomy1	**2(3)**	**2**	**0**		**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W12	Avian anatomy2	**2(3)**	**2**	**0**	**Formative quiz**	**0**
	Dissection of the thoracic limb of horse		**0**	**1(2)**		
W13	fish anatomy1	**2(3)**	**2**	**0**		**0**
	Dissection of the thoracic		**0**	**1(2)**		

	limb of horse					
W14	fish anatomy2	**2(3)**	**2**	**0**		**0**
	Avian and fish anatomy		**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 (one hour) exam, 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**: General anatomy, Avian anatomy, Fish anatomy**,** Anatomy of urinary system**,** Anatomy of thoracic 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. • Alexander de Lahunta (2015) Veterinary neuroanatomy and Clinical Neurology • G. E. Abdelhakim (2009) Atlas Anatomy of The Horse • K.S. Roy (2009) foundation of veterinary embryology • T.A.McGeady ,P.J.Quinn (2009) Veterinary Embryology • Course note • Alexander de Lahunta (2015) Veterinary

		neuroanatomy and Clinical Neurology • T.A.McGeady ,P.J.Quinn (2009) Veterinary Embryology.
	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:

Topic	A) Knowledge and understanding	B) Intellectual skills	C) Professional and practical skills	D) General and transferable skills
General Arthrology (syndesmology)	a1, a3, a4	b1	c4	d1,d2,d3,d4
Avian Anatomy	a2, a4	b1	c4	d1,d2,d3,d4
Fish Anatomy	a2, a3, a4	b1	c4	d1,d2,d3,d4
Urinary System	a4	b6	c5	d1,d2,d3,d4
General Osteology	a4	b2, b3	c2, c3	d1,d2,d3,d4
Dissection of the thoracic limb	a5	b2, b4, b5	c1	d1,d2,d3,d4

B-Teaching and learning

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

-Course coordinator:
Prof. Dr. Ahmed Abdel-Rahman Kassab
-Program coordinator: Prof. Dr. Mahmoud Abouelroos