





# Specification for anatomy and embryology course 2019/2020

# A-Affiliation

| 1. | Relevant program               | Bachelor of Veterinary Medical Sciences<br>(BVMSc) |
|----|--------------------------------|--|
| 2. | Department offering the course | Anatomy and embryology                             |

**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                        | Anatomy and embryology   |
|----|-------------------------------------|--------------------------|
| 2. | Course code                         | 202 (A) III              |
| 3. | Level                               | $2^{nd}$ year            |
| 4. | Semester                            | 1 <sup>st</sup> semester |
| 5. | Total hours/week                    | 4                        |
| 6. | Lecture hours/week                  | 2                        |
| 7. | Practical hou <mark>rs/wee</mark> k | 2                        |

# **C-Professional Information**

## 1- Course learning objectives

The course provides the principle information of anatomy the digestive and lymphatic systems. This course provides the principle information of abdomen and thorax. This will enable students to gain skills for comparative anatomy of the digestive and lymphatic systems in the different domestic animals

## **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- Depict a concise knowledge about the anatomy of the digestive system of different animal species

a2- Identify the anatomical features and positioning of lymphatic system of different domestic animals

a3- Describe a comprehensive knowledge about the digestive and lymphatic system and comparative anatomy among different domestic animals

a4-Mention the principles comparative anatomy of the vertebral Column, ribs, sternum, digestive and thorax

## **b- Intellectual skills**

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

b1- Compare the different features of digestive and lymphatic systems in the animals species







- b2- Evaluate the skills of dissection of the abdomen and thorax
- b3- Illustrate the types of bones of the vertebral column and the animal species
- b4- Inspect of the site of different digestive and lymphatic in different animals

#### c- Professional and practical skills

- After successful completion of the course the students should be able to:
- c1- Measure the professional capability to dissect the abdomen and thorax
- c2- Measure the professional capability to identify the shape and position of different bones of the vertebral column and sternum of different domestic animals
- c.3- Evaluate the skills to compare between bones of the vertebral column, sternum and ribs of different domestic animals
- c.4- Evaluate the skills to compare between organs digestive systems and lymphatics of different domestic animals

## d- General and transferable skills

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

- d1- Team working skills group dynamics to reach objectives
- d2- Search skills (internet and conduct a search in digital library)
- d3- Problem solving skills
- d4- Oral presentations skill
- d5- time management skills (Schedule tasks in order of importance)

## **3-** Course contribution in the program ILOs:

| Cou | Irse ILOS                         | Program ILOS     |  |  |  |  |
|-----|-----------------------------------|------------------|--|--|--|--|
| А   | Knowledge and understanding       | a <sup>3</sup>   |  |  |  |  |
| В   | Intellectual skills               | b <sup>1</sup>   |  |  |  |  |
| С   | Professional and practical skills | c <sup>1</sup>   |  |  |  |  |
| D   | General and transferable skills   | d <sup>1,2</sup> |  |  |  |  |

## **3.1-** Course contents:

| Topic                                | Lecture hours | Practical<br>hours |
|--------------------------------------|---------------|--------------------|
| Digestive System                     | 20            | -                  |
| Lymphatic System                     | 10            | -                  |
| Vertebral Column                     | -             | 6                  |
| Anatomy of Ribs & Sternum            | -             | 4                  |
| Dissection of the Abdomen and Thorax | -             | 20                 |
| Total hours                          | 30            | 30                 |

The midterm and practical exams are included during the semester

#### 3.2- ILOs matrix:







| Topic             | A)            | B)           | C)               | D)           |
|-------------------|---------------|--------------|------------------|--------------|
| -                 | Knowledge and | Intellectual | Professional and | General and  |
|                   | understanding | skills       | practical skills | transferable |
|                   |               |              |                  | skills       |
| Digestive System  | a1, a3,a4     | b1,b4        | c1,c4            | d1 to d5     |
| Lymphatic System  | a2, a3,a4     | b1,b4        | c1,c4            | d1 to d5     |
| Vertebral Column  | a4            | b3           | c2,c3            | d1 to d5     |
| Anatomy of Ribs   | a4            | b3           | c2,c3            | d1 to d5     |
| &Sternum          |               |              |                  |              |
| Dissection of the | a4            | b2           | c1               | d1 to d5     |
| Abdomen and       |               |              |                  |              |
| Thorax            |               | -            |                  |              |

## 4- Teaching and learning and assessment methods:

| ILOs        |                  | )s         | Teaching and<br>Learning method |     |   |    |    |   |    |          | assessment method |      |           |         |   |
|-------------|------------------|------------|---------------------------------|-----|---|----|----|---|----|----------|-------------------|------|-----------|---------|---|
|             |                  | L          | P&M                             | D&S | P | Ps | Bs | S | Rp | semester | midterm           | oral | practical | written |   |
|             | ndir             | a1         | Х                               | Х   | х | х  | 0  | х | Х  | 0        | Х                 | Х    | Х         | 0       | Х |
| and         | understandir     | a2         | Х                               | Х   | х | х  | 0  | х | Х  | 0        | х                 | X    | Х         | 0       | Х |
|             | Idei             | a3         | Х                               | Х   | X | х  | 0  | X | Х  | X        | X                 | X    | Х         | 0       | Х |
|             | IN               | a4         | Х                               | Х   | х | X  | 0  | X | X  | 0        | Х                 | 0    | х         | 0       | Х |
| tua         | ~                | b1         | Х                               | Х   | х | х  | х  | х | Х  | 0        | Х                 | X    | X         | 0       | Х |
| Intellectua | skills           | b2         | Х                               | X   | Х | X  | X  | x | X  | 0        | Х                 | X    | Х         | 0       | Х |
| Itel        | sk               | b3         | Х                               | Х   | х | х  | X  | х | Х  | 0        | X                 | 0    | х         | 0       | Х |
| In          | Ī                | b4         | Х                               | Х   | X | X  | X  | X | Х  | X        | Х                 | 0    | X         | 0       | Х |
| Ч           | cal              | <b>c</b> 1 | 0                               | Х   | х | x  | X  | X | X  | 0        | X                 | 0    | х         | X       | 0 |
| and         | <u>oractical</u> | c2         | 0                               | X   | X | X  | X  | X | X  | 0        | X                 | 0    | X         | X       | 0 |
| al          | ora              | c3         | 0                               | X   | X | x  | X  | x | X  | 0        | x                 | 0    | X         | X       | 0 |
|             |                  | c4         | 0                               | Х   | x | x  | х  | X | Х  | 0        | x                 | 0    | X         | Х       | 0 |
| ckille      |                  | d1         | Х                               | X   | 0 | Х  | X  | 0 | 0  | X        | Х                 | 0    | X         | 0       | 0 |
| ck          | and a            | d2         | 0                               | X   | X | 0  | 0  | х | 0  | 0        | X                 | 0    | X         | 0       | X |
| C.L.O       | 210              | d3         | X                               | Х   | x | X  | X  | Х | Х  | 0        | Х                 | 0    | X         | x       | X |
| General     |                  | d4         | Х                               | Х   | 0 | 0  | 0  | 0 | 0  | X        | 0                 | 0    | x         | 0       | 0 |
| C           | י                | d5         | Х                               | 0   | 0 | 0  | 0  | 0 | 0  | X        | 0                 | X    | 0         | Х       | Х |

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

## 5- Assessment timing and grading:

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

# 6- List of references







## **6.1- Course notes:** department note

#### **6.2-** Essential books (text books)

- 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

## 6.3- Recommended books

- Course note
- Klaus-Dieter Budras (2011) Bovine Anatomy
- Thomas O. Mccracken (2008) color atlas of small animal anatomy: the essentials.

#### 6.4- Periodicals, Web sites, . . . etc

- Acta Anatomica.
- Equine Veterinary journal
- American Journal of Veterinary Anatomy
- American Journal of Veterinary Research
- Veterinary Record
- <u>www.ekb.eg</u>

#### 7- Facilities required for teaching and learning

- Data show
- White board
- Anatomy laboratory
- Phantoms and models for different organs and bones
- Carcasses for dissection and demonstration
- Anatomy museum or anatomy skill lab.

Course coordinator: Dr. Hatem Bahgaat Houssainy

Head of department Dr. Hatem Bahgaat Houssainy

Signature.....

Date. 1/10/2019