Course Specifications

Anatomy and Embryology second (A)

Benha University   **Faculty of Veterinary Medicine**

Program on which the course is given: **Bachelor of Veterinary Medical Science**s

Department offering the course: **Department of Anatomy & Embryology**

Academic year / Level : **2ⁿᵈ year**
Date of specification approval: Ministerial Decree No 921, on 15/9/1987

 Date of Dept approval: 11/1/2011

A- Basic Information

Title: Digestive and lymphatic systems anatomy.
Code: Vet 00622 b

No of Hours:
   Lecture: ٣ h/W
   Practical: 4 h/W
   Total: ٧ h/W

B- Professional Information

1 – Overall Aims of Course:

The aim of this course is to provide 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 Course (ILOs)

a- Knowledge and Understanding:
After successful completion of the course the students should be able to:

a.1. Recognize a concise knowledge about anatomy of the digestive system of different animal species

a.2. Understand the anatomical features and positioning of lymphatic system of different domestic animals

a.3. Definition and comprehensive knowledge about the digestive and lymphatic system and comparative anatomy among different domestic animals .

a.4. Definition and comparative anatomy of the bones and muscles of the domestic animals.

b- Intellectual Skills

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

b.1. Evaluate the skills of dissection of the abdomen and thorax.

b.2. Illustrate the types of bones of the vertebral column and the animal species.

b.3. Compare from the different features of digestive and lymphatic systems in the animals species.

b.4. Inspect of the origin and insertion of different skeletal muscles .

c- Professional and Practical Skills

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

c.1. Measure the professional capability to dissect the abdomen and thorax.

C.2. Measure the professional capability to conduct 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 different systems of different domestic animals.

d- General and Transferable Skills

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

d.1. Use computers (word, spreadsheet, presentation, database).

d.2. Use internet and conduct a search in digital library.

d.3. Make oral presentations.

d.4. Retrieve information from different sources independently.

d.5. Solve any scientific problem.

d.6. Know group dynamics to reach objectives

d.7. Recognizing and identifying views of others

d.8. Schedule tasks in order of importance

d.9. Facilitate learning to all team

3- Contents:

Topic	No. of hours	Lecture	Practical
Digestive System	30	30	-
Lymphatic System	15	15	-
Vertebral Column	12	-	12
Anatomy of Ribs &Sternum	4	-	4
Dissection of the Abdomen and Thorax	44	-	44
Total	**105**	**45**	**60**

4-ILOs matrix

Content	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Digestive System	**a1-a3**	**b3**	**c4**	**d6-d7-d8-d9**
Lymphatic System	**a2-a3**	**b3**	**c4**	**d6-d7-d8-d9**
Vertebral Column	**a4**	**b1-b2**	**c2-c3**	**d6-d7-d8-d9**
Anatomy of Ribs &Sternum	**a4**	**b1-b2**	**c2-c3**	**d6-d7-d8-d9**
Dissection of the Abdomen and Thorax	**a4**	**b1-b2-b4**	**c1**	**d6-d7-d8-d9**

5- Assessment-ILOS matrix

Assessment	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Practical examination	**a4**	**b1-b2-b4**	**c1-c2-c3**	**d6-d7-d8-d9**
Final- term examination	**a1-a2-a3-a4**	**b1-b2-b3-b4**	**c1-c2-c3-c4**	**d6-d7-d8-d9**
Oral examination	**a1-a2-a3-a4**	**b1-b2-b3-b4**	**c1-c2-c3-c4**	**d6-d7-d8-d9**
Mid term	**a1-a2-a3**	**b3**	**c4**	**d6-d7-d8-d9**

6– Teaching and Learning Methods

Lectures and lab sessions in which one or more of the following facilities are used:

٦.1. Freshly died horses and donkeys.

٦.2. Educational models and phantoms.

٦.3. CD's, Power Point slides and video tapes in lecturing.

6.4. Prepared bones of died animals.

6.5. Demonstrating formalin preserved carcasses.

6.6. Using donkey as a model lab animal for equine

7- Student Assessment Methods

7.1. Written exam to assess knowledge, understanding and intellectual skills.

7.2. Oral exam to assess knowledge, understanding and intellectual skills.

7.3. Practical exam to assess professional and practical skills.

Assessment Schedule

Assessment 1: Midterm exam at week 7

Assessment ٢: Practical exam at week 13

Assessment ٣: Final- term at week   15

Assessment٤: Oral exam at week   15

Weighting of Assessments

Practical examination	30	%
Final- term examination	50	%
Oral examination	10	%
Mid term	10	%
Total	**100**	**%**

8- List of References

8.1. Course notes

8.2. Essential books (Text books)

- Digestive system
- Lymphatic system
- Dissection of the abdomen and thorax

8.3. Recommended books

- **Getty, R (1975)**. Sisson and Grossman'sThe Anatomy of the Domestic Animals volume 1. 5th edition, W B Saunders.

- **Nickel, R., Schummer, A., Seiferle, E. / Paul Parey (1985)**.
The Anatomy of the Domestic Animals.
- Atlas of veterinary anatomy

8.4. Periodicals, Web sites,….. etcActa anatomica

- Equine veterinary journal

- Journal of Animal Science

- Research on Veterinary Science

- American Journal of Veterinary Anatomy

- American Journal of Veterinary Research

- Web sites: htt://www.pubmed.com

9- Facilities Required for Teaching and Learning

- A laboratory for dissection and demonstration of the muscles, bones and nerves of carcasses.

- Scalpels, knifes and saws

- Holders and tanks for preservation of organs and muscles.

- Donkeys as a model for horse

- Phantoms and models for different organs and bones

- Multimedia projector and a computer

- Slide projector

- Overhead projector

- Carcasses and animals for dissection and demonstration

Course Coordinator:

  Prof. Dr. Hatem Bahgaat Houssainy

Head of Department:

  Prof. Dr. Hatem Bahgaat Houssainy

Date: 11 /1 / 2011

Course Specifications

Anatomy and Embryology second (B)

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A- Basic Information

   Title: Digestive and lymphatic systems anatomy.
   Code: Vet 00622 b

No of Hours:
   Lecture: ٣ h/W
   Practical: 4 h/W
   Total: ٧ h/W

B- Professional Information

1 – Overall Aims of Course:

   The aim of this course is to provide the principle information of anatomy

the nervous and respiratory systems. This course provides the principle

information of special embryology. This will enable students to gain skills for

comparative anatomy of the different domestic animals and the nervous and

   respiratory systems.

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

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

   a.1. Recognize a concise knowledge about anatomy of the nervous system of

   different animal species.

   a.2. Recognize a concise knowledge about respiratory system.

   a.3. Describe the anatomical features and branches of nervous system of

   different domestic animals

   a.4. Describe the anatomy of the nervous system and the comparative anatomy

   among different domestic animals and special embryology.

a.5. Describe the comparative anatomy of the skull and muscles of the head and neck.

a.6. Recognize a concise knowledge about special embryology.

b- Intellectual Skills

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

b.1. Evaluate the skills for dissection of the head and neck .

b.2. Illustrate the type of the skull in the different animal species.

b.3. Illustrate the different features of nervous and respiratory systems.

b.4. Inspect the origin and insertion of different skeletal muscles of the head and neck.

b.5. Determining the primordial origin of the different body systems and organs.

c- Professional and Practical Skills

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

c.1. Measure the professional capability to dissect the head and neck.

c.2. Measure the professional capability to conduct shape of the skulls of different domestic animals.

c.3. Evaluate the skills to compare between bones of the skull of different domestic animals.

c.4. Evaluate the skills to compare between nervous and respiratory systems of different domestic animals .

c.5. Evaluate the skills for determination of the primordial origin of the different body systems and organs.

d- General and Transferable Skills

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

d.1. Use computers (word, spreadsheet, presentation, database).

d.2. Use internet and conduct a search in digital library.

d.3. Make oral presentations.

d.4. Retrieve information from different sources independently.

d.5. Solve any scientific problem.

d.6. Know group dynamics to reach objectives

d.7. Recognizing and identifying views of others

d.8. Schedule tasks in order of importance

d.9. Facilitate learning to all team

3- Contents:

Topic	No. of hours	Lecture	Practical
Respiratory System	15	15	-
Nervous System	14	14	-
Special Embryology	16	16	-
Skull Anatomy	10	-	10
Dissection of the Head and Neck	50	-	50
Total	**105**	**45**	**60**

4-ILOs matrix

Content	ILOs			
	Knowledge and understanding	**Intellectual**	**Professional and practical**	**General and transferable**
Respiratory System	a2	b3	c4	d6-d7-d8-d9
Nervous System	a1-a3-a4	b3	c4	d6-d7-d8-d9
Special Embryology	a6	b5	c5	d6-d7-d8-d9
Skull Anatomy	a5	b2	c2-c3	d6-d7-d8-d9
Dissection of the Head and Neck	a5	b1- b4	c1	d6-d7-d8-d9

5- Assessment-ILOS matrix

Assessment	ILOs			
	Knowledge and understanding	**Intellectual**	**Professional and practical**	**General and transferable**
Practical examination	a5	b1-b2-b4	c1-c2-c3	d6-d7-d8-d9
Final- term examination	a1-a2-a3-a4-a5-a6	b1-b2-b3-b4-b5	c1-c2-c3-c4-c5	d6-d7-d8-d9
Oral examination	a1-a2-a3-a4-a5-a6	b1-b2-b3-b4-b5	c1-c2-c3-c4-c5	d6-d7-d8-d9
Mid term	a1-a2-a3-a4-a6	b3-b5	c4-c5	d6-d7-d8-d9

6– Teaching and Learning Methods

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Assessment ٣: Final- term at week   15

Assessment٤: Oral exam at week   15

Weighting of Assessments

Practical examination	30	%
Final- term examination	50	%
Oral examination	10	%
Mid term	10	%
Total	**100**	**%**

8- List of References

8.1. Course notes

8.2. Essential books (Text books)

- Nervous system.
- Respiratory system.
- Special embryology

8.3. Recommended books

- **Getty, R (1975)**. Sisson and Grossman'sThe Anatomy of the Domestic Animals volume 1. 5th edition, W B Saunders.

- **Nickel, R., Schummer, A., Seiferle, E. / Paul Parey (1985)**.
  The Anatomy of the Domestic Animals.

- Atlas of veterinary anatomy

- Embryology of domestic animals

8.4. Periodicals, Web sites,….. etc

- Acta anatomica

- Equine veterinary journal

- Journal of Animal Science

- Research on Veterinary Science

- American Journal of Veterinary Anatomy

- American Journal of Veterinary Research

- Veterinary record.

- http://www.pubmed.com

9- Facilities Required for Teaching and Learning

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Date: **11 / 1 / 2011**