



Applied and Comparative Anatomy (General and Special)

Course Spec 2014/2015

1-Basic information

| | |
|-------------------------------------|--|
| Course Code: | 211 & 221 |
| Course title : | Applied and Comparative Anatomy (General and Special) |
| Academic year: | 2 nd year (1 st and 2 nd semesters) |
| Programme title: | Bachelor of Veterinary Medical Sciences |
| Contact hours/week/semester: | Lecture: 2 hour/week/semester Practical: 3 hour/week/semester |

2-Professional information

1- Overall aims of course

At the end of the course, the students are expected to know and understand the veterinary comparative anatomy and development of the different systems constructing the mammalian body and apply all anatomical information in the field of clinics via applied anatomy.

2- Intended learning outcomes of course (ILOs)

a-Knowledge and understanding

By the end of this course the student should be:

- a1- Describe the basic anatomical terms of structures and organs
- a2- Recognize the comparative anatomy of the digestive and respiratory systems
- a3- Explain the comparative developmental anatomy of the different systems in the mammalian bodies.
- a4- Indicate the anatomy of the nervous system and sense organs and know how it controls the animal body.
- a5- Clarify the topographical anatomy via the applied anatomy.

a6- Describe the Lymphatic system and its importance in the field of veterinary anatomy.

b-Intellectual skills

By the end of this course the student should be able to:

- b1- Relate brief information about the organs that concerned with the clinical examination.
- b2- Differentiate the comparative anatomy of different organs in the animal body.
- b3- Point out the basic principles and sequential development of the organ systems.
- b4- Diagnose the anatomical problems in the dissecting rooms.

c-Professional and practical skills

By the end of this course the student should be able to:

- c1- Dissect the thoracic and abdominal wall accurately .
- c2- Use the easy and correct dissection of the digestive and respiratory organs.
- c3- Demonstrate anatomical facts in dissection of the head, neck and sense organs.
- C4- . Employs all the gained knowledge and understanding of anatomy of the nervous system in a skillful pattern
- C5- Illustrate topographical position of the organ in relation to clinical subjects

d-General and transferable skill

- d1- Communicate efficiently with colleagues and teachers
- d2- Construct a poster
- d3- Manage the time efficiently.
- d4- Develop a team work.

3-Topics and contents

First semester

| Topic | No. of hours | | |
|--|--------------|-----------|-------|
| | Lectures | Practical | Total |
| Systems of mammalian body (general) Digestive system Respiratory system Clinical anatomy of the digestive and respiratory systems | 24 | | 24 |
| Lymphatic system | 6 | | 6 |
| 1. Dissection of the abdomen and thorax 2. Bones of axial skeleton 3. Muscles of abdomen and thorax 4. Splanchnology | | 45 | 45 |
| Total | 30 | 45 | 75 |

Second semester

| Topic | No. of hours | | |
|---|--------------|-----------|-------|
| | Lectures | Practical | Total |
| Comparative developmental anatomy of all systems | 12 | | 12 |
| Nervous system | 10 | 2 | 12 |
| Anatomy of the sense organs | 4 | 3 | 7 |
| Applied anatomy | 4 | | 4 |
| 1. Dissection of the head and neck 2. Skull *comparative* 3. Muscles of head 4. Structures in the head | | 40 | 40 |
| Total | 30 | 45 | 75 |

4-Teaching and learning methods -

- Lectures
- Practical sections
- Dissection groups
- Small group learning for enhancement of self learning

6-Student assessment

6.1.Assessments methods

| Method | Matrix alignment of the measured ILOs/ Assessments methods | | | |
|--|--|---------|-----------|---------|
| | K&U (a) | I.S (b) | P&P.S © | G.S (d) |
| 1-Student activities and periodical exam | 2,3,4 1, 2,3, 4, 5, 6 | 4 | | 1-4 |
| 2- Practical examinations | | 1,2 | 1,2,3,4,5 | |
| 3- Oral examinations | 1,3,4,6 | 2,3 | | |
| 4- Written examinations | 1,2,3,4,5,6 | 1,2 | | |

6.2-Assessment schedules/semester

| Assessments methods | Time of Assessments |
|---------------------------|-----------------------|
| 1- Periodical exam | 8 th Week |
| 2- Practical examinations | 16 th Week |
| 3- Written examination | 16 th week |
| 4- Oral examinations | 16 th week |
| 5- Student activities | Along the semester |

6.3-Weight of assessments

| Assessment | Allocated Mark | | |
|--|----------------------|----------------------|-------|
| | 1 st term | 2 nd term | Total |
| 1-Student activity and periodic examinations | 5 | 5 | 10 |
| 2- Practical examinations | 10 | 10 | 20 |
| 3- Written examination | 25 | 25 | 50 |
| 4- Oral examinations | 10 | 10 | 20 |

7- List of references

7.1. Departmental Notes

- 1- Digestive, respiratory and lymphatic system
- 2- Neuroanatomy .
- 3- Comparative developmental anatomy
- 4- Applied anatomy.
- 5- Dissection of the abdomen and thorax.
- 6- Dissection of the head and neck

7.2.Essential books

1-Textbook of Veterinary Anatomy, 3rd ed. (2002): By Dyce, Sack and Wensing.W.B. Saunders Company, Philadelphia.

7.3. Recommended books

1. **Budras, K., Sack, W. O. and Röck, S. (2009):** Anatomy of the horse. Fifth, revised Edition. Schlütersche Verlagsgesellschaft. Hans-Böckler-Alle 7, 30173 Hannover.
2. **König, H. & Liebich, H. G. (2004):** Veterinary Anatomy of Domestic Mammals. Schattauer, GmbH, Stuttgart.

7.4. Journals , Websitesetc

Journals:

- Anatomia, Histologia, Embryologia, (Journal of the World Association of Veterinary Anatomists)
- Anatomical Record
- Veterinary Radiology

Periodicals, web sites, etc.

Periodicals, web sites, etc.

- <http://vanat.cvm.umn.edu>

- Veterinary Anatomy Course.
- CONVINCE
- Comparative Mammalian Brain Collection.
- Veterinary Courseware at Massey University , New Zealand

Head of department

Dr. Reda rashed

Course coordinator

Dr. Khaled shoghy

Matrix alignment of the course topics and ILOs

FIRST SEMESTER

| Topic | No. of hours /week | | Total hours /semester | Hours for lecture. | Hours for pract. | ILOs | | | | T&L.methods | | | | |
|--|--------------------|--------|-----------------------|--------------------|------------------|-----------|---------|---------|------------|-------------|---------|-----------------------|---------------|------------|
| | Lect. | Pract. | | | | K & U (a) | I.S (b) | P.P.S © | G.T .S (d) | Lect. | Pract . | Self& active leanin g | Audi ovisu al | Case study |
| Systems of mammalian body Digestive system Respiratory system Clinical anatomy of the digestive and respiratory systems | 2 | 3 | 39 | 24 | 15 | 1, 2 | 1,2 | .. | 2 | √ | √ | √ | √ | |
| Lymphatic system | | | 6 | 6 | 0 | 1, 6 | 4 | .. | 2 | √ | .. | √ | | |
| Dissection of the abdomen and thorax Bones of axial skeleton Muscles of abdomen and thorax Splanchnology | | | 30 | .. | 30 | | 1,4 | 1,2, 5 | 1,3, 4 | | √ | √ | √ | |

