



## 9. Learning Outcomes, Teaching ,Learning and Assessment Methode

### A- Cognitive goals .

A1- Teaching the student the concept of anatomy and its general principles

A2- Knowledge, understanding and comprehension of the scientific subject curriculum

A3- To classify the theoretical and practical needs for the development of learning and teaching in the appropriate manner with the scientific material

A4- Identifying all the different organs and organs of the animal's body and the location of each organ in the body.

A 5- Knowing the relationship of each member with the neighboring members

A6- Identifying the shape, size, shape, and color of each organ, in order to identify the changes that occur to it when infected with pathological pests, bacterial or non-microbial.

### B. The skills goals special to the course.

B1 - Teaching the student how to dissecting anatomy

B2 - Teaching the student to use scientific means to kill an animal and how to fix its carcass with preservatives for the purpose of preserving it for a long time without decomposing.

B3 - Teaching the student the technique of dyeing some vessels, especially blood

vessels, with special dyes and following a scientific method to clarify these vessels during autopsy and to acquire a solid rubbery texture that can be durable for a long time.

#### Teaching and Learning Methods

- 1) lectures.
- 2) Discussions during and after the lecture.
- 3) Motivation through questions and answers.
- 4) Homework
- 5) Preparing scientific reports

#### Assessment methods

1. Semester and final theory exams by 65%
2. Semester and final practical exams at a rate of 30%
- 3- Daily exams (cues)
3. Extracurricular activities (reports, embalming anatomy models, making wall posters) 5%

#### C. Affective and value goals

- C1.
- C2.
- C3.
- C4.

#### Teaching and Learning Methods

- 1) lectures.
- 2) Discussions during and after the lecture.
- 3) Motivation through questions and answers.
- 4) Homework
- 5) Preparing scientific reports

#### Assessment methods

1. Semester and final theory exams by 65%
2. Semester and final practical exams at a rate of 30%
3. Evaluation of extra-curricular activities (reports, posters and homework) by 5%
4. Daily exams

D. General and rehabilitative transferred skills (other skills relevant to employability and personal development)

D 1- Team work: working in harmony with the group or team.

D2- Initiative Motivation to work: The ability to take the initiative, identify hypotheses, and develop ideas and proposed solutions.

D3 - Planning & organization: The ability to develop plans and programs that are feasible for implementation.

D 4- Flexibility: adapting to situations.

D 5- Time management: The ability to work on specific dates.

## 10. Course Structure ( first semester)

| Week | Hours | ILOs / practical  | Unit/Module or Topic Title / theoretical | Teaching Method                             | Assessment Method                                       |
|------|-------|---|--|---|---|
| 1    | 5     | Bones of thoracic limb, joints, scapula of horse          | Introduction to anatomy                  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 2    | 5     | Humerus and comparative anatomy                           | GENERAL OSTEOLOGY                        | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 3    | 5     | Radius and ulna with comparison                           |  | Theoretical (2 hours) + practical (3 hours) | Homework  |
| 4    | 5     | Carpal bones in horse and metacarpal and phalanges bones  |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 5    | 5     | Muscles of the shoulder girdle of the sheep               | General syndesmology (arthrology)        | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 6    | 5     | The lateral surface of shoulder muscles and arm in sheep  |  | Theoretical (2 hours) + practical (3 hours) | Homework  |
| 7    | 5     | The medial surface of shoulder muscles and arm in sheep   |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 8    | 5     | Mid-term exam.  |  |   | Theoretical (25) and practical (10) exams + reports (5) |
| 9    | 5     | Muscles of the forearm and manus (extensors and flexors ) | Myology                                  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 10   | 5     | Arteries and nerves of the thoracic limb in sheep         |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 11   | 5     | Thoracic, lumbar vertebrae and sacrum in                  |  | Theoretical (2 hours) + practical (3        | Homework  |

|    |   |  |                |   |   |
|----|---|--|----------------|---|---|
|    |   | horse  |                | hours)                                      |   |
| 12 | 5 | Ribs and sterium in horse                            | cardiovascular | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 13 | 5 | The hoof in horse and claw of the ox                 |                | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 14 | 5 | Urinary system (kidneys, ureter and urinary bladder) |                | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 15 | 5 | General review of articles                           |                | Theoretical (2 hours) + practical (3 hours) |   |
|    |   | Final-term exam.                                     |                |   | Theoretical and practical exams (40+20) |

### 10. Course Structure ( second semester)

| Week | Hours | ILOs / practical  | Unit/Module or Topic Title / theoretical | Teaching Method                             | Assessment Method                                       |
|------|-------|---|--|---|---|
| 1    | 5     | Comparative anatomy of the pelvic bone                      | Urinary system                           | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 2    | 5     | Comparative anatomy of the femur                            |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 3    | 5     | Comparative anatomy of the tibia and fibula                 |  | Theoretical (2 hours) + practical (3 hours) | Homework  |
| 4    | 5     | Tarsus and metatarsal bone in horse                         | Female genital system                    | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 5    | 5     | Muscles of the sub lumber, hip and in sheep                 |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 6    | 5     | Muscles of the thigh in sheep                               |  | Theoretical (2 hours) + practical (3 hours) | Homework  |
| 7    | 5     | Review  |  | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 8    | 5     | Mid-term exam.  |  |   | Theoretical (25) and practical (10) exams + reports (5) |
| 9    | 5     | Flexor and extensor muscles of the pelvic limb in sheep     | Male genital system                      | Theoretical (2 hours) + practical (3 hours) | daily test  |
| 10   | 5     | Arteries and sacrolumbar plexuses and nerves of pelvic limb |  | Theoretical (2 hours) + practical (3 hours) | daily test  |

|    |   |  |                   |   |   |
|----|---|--|-------------------|---|---|
| 11 | 5 | Inguinal region and mammary gland in sheep                             | Common integument | Theoretical (2 hours) + practical (3 hours) | Homework                                |
| 12 | 5 | Male reproductive system in sheep (testis and scrotum)                 |                   | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 13 | 5 | Female reproductive system in sheep (ovaries, uterine tube and uterus) | hoof              | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 14 | 5 | Anatomy of the heart   |                   | Theoretical (2 hours) + practical (3 hours) | daily test                              |
| 15 | 5 | General review of articles   |                   | Theoretical (2 hours) + practical (3 hours) |   |
|    |   | Final-term exam.   |                   |   | Theoretical and practical exams (40+20) |

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|--|---|
| 11. Infrastructure   |   |
| 1. Books Required reading:   | non   |
| 2. Main references (sources)   | <ol style="list-style-type: none"> <li>1. The Anatomy of Domestic Animals. 5th ed. Getty, R. (1975). Philadelphia Toronto USA.</li> <li>2. Viscera of the domestic animals. Nickle and schummer (1982),</li> <li>3. Atlas of equine anatomy 2nd edition 1983.</li> <li>4. Clinical anatomy of the horse. 1st ed. Hilary M.; Peter F.; Diana S. and David M. (2005). Mosby Philadelphia.</li> <li>5. التشريح البيطري / الدكتور عبدالقادر جاسم الشихلي الطبعة الثانية ١٩٨٩</li> </ol> |
| A- Recommended books and references (scientific journals, reports...). |   |
| B-Electronic references, Internet sites...                             | Wikipedia   |
| 12. The development of the curriculum plan                             |   |

1. Searching for modern methods and means of teaching and learning away from the old traditional recitation method.
2. Relying on modern educational means to transfer information.
3. The use of modern devices, machines and technologies, especially electronic ones, to convey information so that the student uses all his auditory, visual and sensory senses in comprehending and storing the information in his mind.
4. Using modern methods of preserving corpses in safe ways without affecting the texture, color and content of the corpse, and at the same time replacing scratched preservatives (formalin), which are harmful to the public health of teachers, students and workers in the autopsy laboratory. Where the corpses were preserved by freezing method in our laboratory recently and proved a high rate of success.