

University: Damanhour
Department: Physiology

Faculty: Veterinary Medicine

Animal Physiology Course Specifications (2010 - 2011)

Program(s) on which the course is given: BVSc
Department offering the program: ---
Department offering the course: Physiology
Major or Minor element of programs: Major
Academic year /Level: 2nd Year 1st and 2nd semester
Date of specification approval:

A. BASIC INFORMATION

Title: Animal Physiology

Code: 2APHY, 2BPHY

Hours:

Lectures 5 hrs/week

Practical 3 hrs/week

Total 240 hrs

B. PROFESSIONAL INFORMATION

1. Overall aims of the course:

- Knowledge: about normal functions of different body systems in mammals, poultry and fish.
- The graduate has the knowledge and understanding of normal behavior and management of animals, poultry and fish.
- The graduate has the knowledge and understanding of the normal physiological basis of organ function and homeostasis.

2. Intended Learning Outcomes (ILOs) of the Course:

a. Knowledge and Understanding:

- a1** Normal functions of cell organelles.
- a2** Function of different body systems and interaction between them during different physiological conditions.

b. Intellectual Skills:

- b1** Analysis of laboratory blood and urine tests.
- b2** Creative thinking to improve reproductive performance in animals.
- b3** Sex reversal in poultry and fish.
- B4** Induced spawning and artificial propagation of fish

c. Professional and Practical Skills:

- c1 Performing hatchery operations in poultry and fish farms.
- c2 Examination and evaluation of hatching outputs.
- c3 Performing sex reversal techniques in fish.
- C4 Control and synchronization of estrous cycle in farm animals

d. General and Transferable Skills:

- d1 Good communications.
- d2 Use of new technology.
- d3 Group working, good management and problem solving ability.

3. Contents:

1st Semester			
Topic	No. of hours	Lectures	Practical
▪ Cell physiology	14	8	6
▪ Body fluids, blood homeostasis	18	12	6
▪ Respiratory system	14	10	4
▪ Digestive system	24	16	8
▪ Nervous system	23	15	8
▪ Cardiovascular	27	14	13
2nd Semester			
▪ Endocrine system	17	11	6
▪ Female reproduction	20	13	7
▪ Male reproduction	20	13	7
▪ Metabolism, & Growth	20	12	8
▪ Fish physiology	24	14	10
▪ Urinary system	19	12	7
Total	240	150	90

4. Teaching and Learning Methods:

- 4.1 Lectures and practical of every topic in the course.
- 4.2 Collection of some information from textbooks.
- 4.3 Sample collection.

5. Student Assessment Methods:

Exam		
5.1	Written Mid-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.2	Written Final-term	To assess the ability to understand and remember knowledge, and intellectual skills
5.3	Practical Final-term	To assess professional and practical skills
5.4	Oral Final-term	To assess skills of analysis and discussion

Assessment Schedule (in each semester):

Exam	Week
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Assessment 1	Written Mid-term	8 th
Assessment 2	Written Final-term	16 th
Assessment 3	Practical Final-term	16 th
Assessment 4	Oral Final-term	16 th

Weighing of assessments			
	Exam	Per Semester (%)	Total (%)
Assessment 1	Written Mid-term	10	20
Assessment 2	Written Final-term	25	50
Assessment 3	Practical Final-term	10	20
Assessment 4	Oral Final-term	5	10
	Total	50	100

6. List of References:

6.1. Course Notes:

- Lecture Notes by Staff members

6.2. Essential Books:

- Duke's Physiology
- Avian Physiology
- Physiology of Fish
- Marchall's (Reproduction and endocrinology of poultry).
- Comparative animal physiology

6.3. Recommended Books:

- Comparative Physiology

6.4. Periodicals, websites, etc

- Journal of Reproduction and Fertility
- Aquaculture Journal
- Poultry Science

7. Facilities Required for Teaching and Learning

- Microscopes, computers (personal and notebook).
- Overhead projectors, video films, datashow.

Course Coordinator: Ismail Yousef Abou-Ghanema

Head of Department: Ismail Yousef Abou-Ghanema

Date: