

## Course spec physiology (A)

**Benha University**

**Faculty of Veterinary Medicine**

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

Department offering the course: **Physiology**

Academic year / Level : 1<sup>st</sup> year

Date of specification approval: Ministerial Decree No 921, on 15/9/1987

Date of Dept approval:

(Then approved in this recent template by department council on  
24/10/2009)

### **A- Basic Information**

**Title: Physiology  
00614a**

**Code: Vet**

No of Hours:

**Lecture: 2 h / W**

**Practical: 3h\w**

**Total: 5 h / W**

### **B- Professional Information**

#### **1 – Overall Aims of Course:**

Provide the students with the basic physiological and biochemical information about the cell structure and functions, Blood, body fluids and respiratory system.

#### **2 – Intended Learning Outcomes of Course (ILOs)**

##### **a-Knowledge and Understanding:**

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

1- **Define** Define the blood, know its constituents and identify the importance of each one.

**Know** Know the different types of anemia and identify the causes of each one.

**Realize** Realize the function of respiratory system and understand some metabolic processes  
**Understand** Understand and recognize the mechanisms of hemostasis and blood coagulation.

#### **b-Intellectual Skills**

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

- 1- Judge examined blood samples and estimate different parameters to give right conclusion about the given samples.
- 2- Diagnose between different types of anemia.
- 3- Determine the suitable cause of the problem and solve it.

#### **c-Professional and Practical Skills**

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

- 1- Perform collection of blood samples from different species of domestic animals.
- 2- Calculate and count RBCs & WBCs and interpret their results.
- 3- Calculate PCV, estimate H b and ESR.
- 4- How to read, write and interpret a report of CBC, other blood tests.
- 5- Diagnose different types of anemia and differentiate between them.

- ▶ **Use haemocytometer in counting of RBCs,**

#### **d-General and Transferable Skills**

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

- ▶ **Information technology skills**
  - ▶ **Using computers (word, spreadsheet, presentation, database)**
  - ▶ **Using internet**
  - ▶ **Conduct a search in digital library**

- ▶ **Communication skills:** direct, emails ...etc.
- ▶ **Presentation skills:** capacity to make oral presentations
- ▶ **Self-learning skills** (retrieve information from different sources independently)
  
- ▶ **Facilitation skills:** able to facilitate learning to all team
- ▶ **Coordinating skills:** able to coordinate for conference, workshop..
- ▶ **Innovation skills:** able to innovate or create

### 3- Contents

Topic	No. of hours	Lecture	Practical
Cell physiology	6	6	-
Physiology of blood and body fluids	49	14	35
Physiology of respiratory system	20	10	10
<b>Total</b>	<b>75</b>	<b>30</b>	<b>45</b>

### 4- content-ILOs matrix

Content	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Cell physiology	xxxx	xxxx	xxxx	Xxxx
Physiology of blood and body fluids	xxxx	xxxxx	xxxx	xxxx
Physiology of respiratory system	xxxx	xxxx	Xxxx	xxxx

### 5- Assessment-ILOS matrix

Assessment	ILOS			
	Knowledge and	Intellectual	Professional and practical	General and transferable

	<b>understanding</b>			
Assessment 1: Quiz examination	<b>A3</b>	-----	<b>C4</b>	<b>D1,8</b>
Assessment 2: Practical examination	<b>A3</b>		<b>C4</b>	<b>D1,8</b>
Assessment 3: Written examination	<b>A3</b>		<b>C4</b>	<b>D1,8</b>
Assessment 4: Oral examination	<b>A3</b>		<b>C4</b>	<b>D1,8</b>

## **6– Teaching and Learning Methods**

4.1- Over head projector.

4.2. Microscopes and other facilities for blood sampling, staining and making blood films.

4.3. Data show.

## **7- Student Assessment Methods**

5.1 . Quiz to assess the understanding of the course.

5.2. Practical to assess skills and practical attitude.

5.3. Written to assess knowledge, information and intellectual skills

5.4. Oral to assess understanding, intellectual and transferable

## **Assessment Schedule**

Assessment 1: Quiz examination	week 6, 8 and 10
Assessment 2: Practical examination	week 13.
Assessment 3: Written examination	week 15
Assessment 4: Oral examination	week 15

## **Weighting of Assessments**

Mid-Term Examination	10%
Practical examination	30%
Final- term examination	50%

Oral examination	10%
Total	100%

## **8- List of References**

### **8.1- Course Notes**

Veterinary Physiology, Edited by M.E. Azab

### **8.2- Essential Books (Text Books)**

1- Ruchebusch, Y., Phaneuf, I. and Dunlop, R. (1991) Physiology of small and large Animals. B.C. Decker, Inc, Philadelphia, Hamilton.

2- Swenson M.J., Reece, W.O. and Comstock (1993) Duke's Physiology of Domestic Animals. 11th edition, publishing Associates a division of Cornell University press. Ithaca and London.

3- Gunningham, J. (1992) Text book of Veterinary Physiology. W.B. Saunders Company, Toronto, Montreal, Tokyo.

4- Guyton, A. (1991) Text book of Medical physiology. 8th, W.B. Saunders Company.

5- Ganong, W.F. (1989) Review of Medical Physiology. 9th (Middle East edition) Appleton and Lang.

8.4- Periodicals, Web Sites, ... etc

## **9- Facilities Required for Teaching and Learning**

Data show, Video Tapes. Kymographs, microscopes and ECG **Course Coordinator: Prof. Dr. M. E. Azab**

**Head of Department: Prof. Dr. M. E. Azab**

Date