

## **Course Specifications (Large Ruminant Medicine)**

**Benha University**  
**Course Specifications**

**Faculty of Veterinary Medicine**

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

Department offering the course: **Department of Animal Medicine**

Academic year / Level : **5<sup>th</sup> Year (2<sup>nd</sup> semester)**

Date of specification approval Ministerial decree No. 921 on 15/ 9/ 1987 (approved in

Date of Dept approval: 9-1-2011

### **A- Basic Information**

**Title: Large Ruminant Medicine**                      **Code: Vet00652b**

**Lecture: 2 hours/week**

**Practical: 3 hours/week**

**Total: 5 hours/week**

### **B- Professional Information**

#### **1 – Overall Aims of Course:**

The aim of this course is to provide cutting-edge information of large ruminant medicinal diseases that are most commonly affecting cows and buffaloes in Egypt and their treatment and control. This will enable students to gain skills for accurate diagnosis, differential diagnosis and treatment of these diseases. Diseases of digestive, respiratory, urinary, metabolic disorders and nutritional deficiency are of particular concern because of their direct relation to the milk and meat production.

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

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

After successful completion of this course, students should be able to:

- a1- Recognize the function and anatomy of different organs of large ruminants
- a2- Define different diseases affecting cattle and buffaloes.
- a3- Know the system affected then the organ within the system.
- a4- Identify the cause-disease interaction through the pathogenesis
- a5- Comprehend differential diagnosis between related diseases
- a6- Understand the general state disorders of large ruminant
- A7- Understand a treatment schedule for each disease with regard to type of drug, effective dose and time of dosing.
- a8- Describe a protocol for prevention and control of large ruminant diseases.

## **b- Intellectual skills**

After successful completion of this course, students should be able to:

- b1- Develop skills on differential diagnosis based on clinical signs.
- b2- Determine inter-relation between system affections.
- b3- Determine the type of diagnostic aids used in diagnosis.
- b4- Decide on the appropriate treatment for each disease.
- b5- Acquiring the skill of reading and comment the diagnostic tools
- b6- Judge on giving a decision for either medical or surgical intervention

## **c Professional and Practical Skills**

After successful completion of this course, the student should be able to:

- c1- Take a case history of diseased cattle and buffaloes.
- c2- Conduct clinical and physical examinations of diseases sheep, goats and donkeys.
- c3- Collect samples for lab. diagnosis.
- c4- Treat diseases by drug injection by various routes of administration.
- c5- Manipulate the advanced diagnostic aids, such as sonar and endoscope in diagnosis of large ruminant diseases.

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

After successful completion of this course, students should be able to:

- d1- Solve problems in farm animal (cattle and buffaloes).
- d2- Communicate with other colleagues for reaching diagnosis.
- d3- Cooperate with other veterinary hospitals, clinics and units in the field of equine practice.
- d4- Use computer and internet to get data about different diseases
- d5- Work in a team during field trips or during group assignments.

## **3- Contents**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Practical</b>
General Medicine of large ruminant	2	2	-
Diseases of Digestive system in large ruminant	4	4	-
Diseases of respiratory system in large ruminant	4	4	-
Metabolic diseases in large ruminant	6	6	-
Diseases of cardiovascular system in large ruminant	2	2	-
Diseases of nervous system in large ruminant	2	2	-
Disease of urinary system in large ruminant	2	2	-

Nutritional deficiency diseases in large ruminant	3	3	-
Diseases of skin in large ruminant	1	1	-
General examination of large ruminant	4	-	4
Clinical examination of Digestive system in large ruminant	6	-	6
Clinical examination of respiratory system in large ruminant	6	-	4
Clinical examination of cardiovascular system in large ruminant	6	-	4
Clinical examination of respiratory system in large ruminant	6	-	4
Clinical examination of nervous system in large ruminant	4	-	4
Clinical examination of urinary system in large ruminant	4	-	4
Clinical examination of skin in large ruminant	3	-	3
Laboratory examination of urine, feces, and ruminal juice	6	-	6
<b>Total</b>	<b>65</b>	<b>26</b>	<b>39</b>

#### 4- content-ILOs matrix

	Content	ILOs			
		Knowledge and understanding	Intellectual	Professional and practical	General and transferable
1.	General Medicine of large ruminant	a4, a6	b1, b2,b3, b4	c1, c2 , c3, c4	d1, d2,
2.	Diseases of Digestive system in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3,d4,
3.	Diseases of respiratory system in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3,d4,
4.	Metabolic diseases in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3,d4
5.	Diseases of cardiovascular system in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3, d4
6.	Diseases of nervous system in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3, d4
7.	Disease of urinary system in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4, c5	d1, d2, d3, d4,
8.	Nutritional deficiency diseases in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4
9.	Diseases of skin in large ruminant	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4
10.	General examination of large ruminant	a1, a6	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
11.	Clinical examination of Digestive system in large ruminant	a1, a2, a3	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
12.	Clinical examination of respiratory system	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5

	in large ruminant				
13.	Clinical examination of cardiovascular system in large ruminant	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
14.	Clinical examination of respiratory system in large ruminant	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
15.	Clinical examination of nervous system in large ruminant	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
16.	Clinical examination of urinary system in large ruminant	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d1, d2, d3, d4,d5
17.	Clinical examination of skin in large ruminant				
18.	Laboratory examination of urine, feces, and ruminal juice	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2 , c3, c4	d2, d3

### 5- Assessment-ILOS matrix

Assessment	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Mid – Term exam	a2, a3, a4, a5	b1, b2		
Practical exam	a1	b1, b2,b3, b4, b5, b6	c1, c2 , c3, c4, c5	
Oral exam	a1, a2, a3, a4, a5	b1, b2,b3		
Final term exam	a2, a3, a4, a5, a6, a7, a8	b1, b2,b3, b4, b5, b6	c1, c2 , c3	
Assignments and research	a4, a5	b1		d1, d2, d3,d4, d5

### 6– Teaching and Learning Methods

- 4.1- Lecture notes and textbooks
- 4.2- Lectures prepared on multimedia as PowerPoint presentations
- 4.3- Practical lessons for case diagnosis and treatment in the vet. hospital
- 4.4- Educational farm for conducting the clinical examination of animal.
- 4.5- Field trips to cattle farm (faculty farm)
- 4.6- Veterinary convoys for diagnosis and treatment of large ruminant cases in veterinary clinics and centers.

## 7- Student Assessment Methods

- 5.1 Mid-term examination
- 5.2 Final-term exam
- 5.3 Oral exam
- 5.4 Practical exam
- 5.5 Assignment and research

### Assessment Schedule

Assessment 1: Mid-term exam	Week 8
Assessment 1: Final-term exam	Week 15
Assessment 2: Oral exam.	Week 15
Assessment 3: Practical exam.	Week 14
Assessment 4: assignment and research	Monthly

### Weighting of Assessments

Mid-term examination	5%
Final-term Examination	50 %
Oral Examination.	20 %
Practical Examination	20 %
<u>Assignment and research</u>	<u>5 %</u>
Total	100%

## 8- List of References

- 8.1- Course Notes
  - Note on Large Ruminant Medicine.
- 8.2- Essential Books (Text Books)
  - Veterinary Medicine by Radostitis et al , 10<sup>th</sup> ed. **2007**
- 8.3- Recommended Books
  - 1- Color Atlas of Diseases and Disorders of Cattle By Roger Blowey and A. David Weaver
- 8.4- Periodicals, Web Sites, ... etc
  - Periodicals:*
    - Journal of Dairy Science.
    - Research on Veterinary Science
    - American Journal of Veterinary Medical Association.
    - American Journal of Veterinary Research.
    - Veterinary Record.
  - Web sites:* <http://www.ivis.org/>  
: <http://www.merckvetmanual.com/mvm/index.jsp>  
[www.drghanem.co.nr](http://www.drghanem.co.nr)

## 9- Facilities Required for Teaching and Learning

- A laboratory of veterinary medical diagnosis.

- Medical stethoscope and thermometer.
- Clinical Teaching cases.
- Ultrasonography (required).
- Fiberoptic endoscope (required).
- Electrocardiograph (ECG).
- Multimedia projector and a computer.
- Slide projector.
- Overhead projector.
- Samples of veterinary drugs.

**Course Coordinators:**

Prof. Dr. Hussam El-Din Mohamed EL-Attar

Prof. Dr. Yassein Mahmoud Abd Al-Raof

Ass. Prof. Mohamed Mohamedy Ghanem

**Department head:** prof. Dr. Faysal Khalil Ibrahim

Date: 9-1-2011