





# Specification for Large Ruminant Medicine course 2019/2020

### A-Affiliation

1.	Relevant program	Bachelor of Veterinary Medical Science (BVMSc)
2.	Department offering the course	Animal Medicine

**Date of specification approval**: ministerial decree No. 1727 on 26/4/2017 (Approved in this template by the department council on 1/10/2019)

### **B-Basic information**

1.	Course title	Large Ruminant Medicine
2.	Course code	511 (B) IV
3.	Level	5 <sup>th</sup> year
4.	Semester	Second semester
5.	Total hours	5
6.	Lecture hours	2
7.	Practical hours	3

### **C-Professional Information**

### 1- Course learning objectives

The aims of this course are to allow student to:

- a- Identify the large ruminant and camel diseases that are most commonly affecting cows, buffaloes and calves in Egypt and their treatment.
- b- Conduct accurate diagnosis, differential diagnosis and treatment of these diseases in large ruminant.

### 2- Intended learning outcomes of the course (ILOs):

### a- Knowledge and understanding

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

- a1- List the function and anatomy of different of Large ruminants.
- a2- Define different diseases affecting Large ruminants.
- a3- Nominate the system affected then the organ within the system.
- a4- Identify the cause-disease interaction through the pathogenesis
- a5- Conduct differential diagnosis between related diseases
- a6- Designate the general state disorders of Large ruminants.
- a7- List 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 ruminants diseases

### **b- Intellectual skills**

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







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

### c- Professional and practical skills

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

- c1- Take a case history from owner of equine patient professionally.
- c2- Conduct clinical and physical examinations of diseases Large ruminants.
- c3- Collect samples for lab. diagnosis.
- c4- Treat diseases by drug injection by various routes of administration.
- c5- Use different diagnostic aids in diagnosis

### d- General and transferable skills

After successful completion of the course the students should have the following skills

- d1. Present scientifically and professionally the scientific information
- d2- Communicate with other colleagues for reaching diagnosis.
- d3- Cooperate with other veterinary hospitals, clinics and units in the field of Large ruminants practice.
- d4- Use computers, software and CDs for educational purposes (searching skill)
- d5- Work in a team during the diagnosis process.

### 3- Course contribution in the program ILOs:

Co	urse ILOS	Program ILOS				
A	Knowledge and understanding	$a^{10}$				
В	Intellectual skills	$b^7$				
C	Professional and practical skills	$c^{3,5,9}$				
D	General and transferable skills	$d^{1,2,3,5}$				

3.1- Course contents:	RSIT	
Topic	Lecture hours	Practical hours
General Medicine of large ruminant	2	-
Diseases of Digestive system in large ruminant	4	-
Diseases of respiratory system in large ruminant	4	-
Metabolic diseases in large ruminant	6	-
Diseases of cardiovascular system in large ruminant	2	-
Diseases of nervous system in large ruminant	2	-
Disease of urinary system in large ruminant	2	-
Nutritional deficiency diseases in large ruminant	4	-
Diseases of skin in large ruminant	4	-
General examination of large ruminant	-	6







Clinical examination of Digestive system in large	-	6
ruminant		
Clinical examination of respiratory system in large	-	4
ruminant		
Clinical examination of cardiovascular system in large	-	4
ruminant		
Clinical examination of respiratory system in large	-	4
ruminant		
Clinical examination of nervous system in large ruminant	-	4
Clinical examination of urinary system in large ruminant	-	4
Clinical examination of skin in large ruminant	-	4
Laboratory examination of urine, feces, and ruminal juice	-	6
Total	30	45

### The midterm and practical exams are included during the semester 3.2- ILOs matrix:

Topic	A)	B)	C)	D)
	Knowledge and	In <mark>tellect</mark> ual	Professional and	General and
	understanding	skills	practical skills	transferable
	1. )	4	000	skills
General Medicine of	a4, <mark>a</mark> 6	b <mark>1, b2,b</mark> 3,	c1, c2, c3, c4	d1, d2,
large ruminant		<b>b4</b>		
Diseases of	a1, a2, a3,	b <mark>1, b2,b</mark> 3,	c1, c2, c3, c4, c5	d1, d2,
Digestive system in	a5, a7, a8	<b>b4</b> , <b>b5</b>		d3,d4,
large ruminant				
Diseases of	, , , , , , , , ,	<b>b</b> 1, <b>b</b> 2, <b>b</b> 3,	c1, c2, c3, c4, c5	d1, d2,
respiratory system in	a5, a7, a8	<b>b4</b> , <b>b5</b>		d3,d4,
large ruminant	4 4	101010	1 2 2 4 5	11 10
Metabolic diseases	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2,
in large ruminant	a5, a7, a8	b4, b5		d3,d4
Diseases of	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2, d3,
cardiovascular	a5, a7, a8	b4, b5		d4
system in large	G.			
ruminant  Diseases of nervous	21 22 22	h1 h2 h2	01 02 04 05	31 32 32
system in large	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2, d3,
ruminant	a5, a7, a8	<b>b4</b> , <b>b5</b>		<b>d4</b>
Disease of urinary	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2, d3,
system in large	a5, a7, a8	b4, b5	(1, (2, (3, (4, (3	d4,
ruminant	as, a1, a0	υ <b>τ</b> , υυ		u-,
Nutritional	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
deficiency diseases	a5, a7, a8	b4, b5	· · · · · · · · · · · · · · · · · · ·	d4
in large ruminant	,,	-, ~-		-
Diseases of skin in	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
large ruminant	a5, a7, a8	<b>b4</b> , <b>b5</b>		d4
General examination	a1, a6	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
of large ruminant		<b>b4</b> , <b>b5</b>		d4,d5
Clinical examination	a1, a2, a3	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,







of Digestive system in large ruminant		b4, b5		d4,d5
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
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
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
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
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
Clinical examination of skin in large ruminant	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2, c3, c4	d2, d3
Laboratory examination of urine, feces, and ruminal juice	a1, a2, a3, a5	b1, b2,b3, b4, b5	c1, c2, c3, c4	d2, d3

## 4- Teaching, learning and assessment methods:

11 (	ILOs		AT.	Teach:			8		assessment method				
ILOS		L	P&M	D	P	Ps	Bs	Ft	semester	midterm	oral	practical	written
	a1	X	X	X	0	0	X	0	X	X	X	0	X
pu g	a2	X	X	X	0	0	X	0	X	X	X	0	X
e ar	a3	X	X	X	0	0	X	0	X	X	X	0	X
edg stan	a4	X	X	X	0	0	X	0	X	X	X	0	X
Knowledge and understanding	a5	X	X	X	0	0	X	0	X	0	X	0	X
Kn	a6	X	X	X	0	0	X	0	X	0	X	0	X
	a7	X	X	X	0	0	X	0	X	0	X	0	X
	a8	X	X	X	0	0	X	X	X	0	X	0	X
skill	b1	X	X	X	0	X	X	X	X	X	X	0	X
	b2	X	X	X	0	X	X	X	X	X	X	0	X
tua	b3	X	X	X	0	X	X	X	X	X	X	0	X
Intellectual	b4	X	X	X	0	X	X	X	X	X	X	0	X
ıtel	b5	X	X	X	0	X	X	X	X	0	X	0	X
In	b6	X	X	X	0	X	X	X	X	0	X	0	X
d Sal	c1	0	X	X	X	X	0	X	X	0	X	X	0
and	c2	0	X	X	X	X	0	X	X	0	X	X	0
al and practical	c3	0	X	X	X	X	0	X	X	0	X	X	0
	c4	0	X	X	X	X	0	X	X	0	X	X	0







	c5	0	X	X	X	X	0	X	X	0	X	X	0
skills	d1	X	X	X	0	0	X	X	X	0	X	X	0
	d2	0	0	X	0	X	X	X	X	0	X	X	0
eral	d3	0	0	0	X		0	X	X	0	X	0	0
en	d4	0	X	X	X	X	0	0	X	0	X	0	0
Ď	d5	0	0	0	X	X	0	0	X	0	X	0	0

L:Lecture, P&M: Presentations & Movies, D&S: Discussions & Seminars PT: Practical, Ps: Problem solving, Bs: Brain storming, Ft: field trip

### 5- Assessment timing and grading:

Assessment method	timing	grade
Mid-term exam and semester work	6 <sup>th</sup> week	15
Practical exam	14 <sup>th</sup> week	20
oral exam	End of semester	15
Written exam	End of semester	50
total		100

### **6- List of references**

### **6.1- Course notes:**

Large Ruminant Medicine: summarized integrated course for 5<sup>th</sup> grade students edited by staff members

### 6.2- Essential books (text books)

- Peter D. Constable, Kenneth W Hinchcliff, Stanley H. Done and Walter Gruenberg (2017): Veterinary Medicine: A textbook of the diseases of cattle, horses, sheep, pigs and goats, 11<sup>th</sup> edn. (Cosntable, Veterinary Medicine)
- Kristin Holtgrew-Bohling (2012) Large Animal Clinical Procedures for Veterinary Technicians.
- Jody Rockett (2009) Veterinary Clinical Procedures.
- Thomas J.Divers (2008) Diseases of Dairy Cattle

### 6.3- Recommended books

- Course note.
- Peter D. Constable, Kenneth W Hinchcliff, Stanley H. Done and Walter Gruenberg (2017): Veterinary Medicine: A textbook of the diseases of cattle, horses, sheep, pigs and goats, 11<sup>th</sup> edn. (Cosntable, Veterinary Medicine)
- Jody Rockett (2009) Veterinary Clinical Procedures.
- Thomas J.Divers (2008) Diseases of Dairy Cattle.

### 6.4- Periodicals, Web sites, ... etc

- Journal of Animal Science.
- Research on Veterinary Science
- Journal of American Veterinary Medical Association
- American Journal of Veterinary Research
- Tropical animal health and production
- Preventive veterinary Medicine
- Benha veterinary medical journal







- http://www.ivis.org
- http://www.merckvetmanual.com/mvm/index.jsp
- www.drghanem.co.nr
- www.ekb.eg

### 7- Facilities required for teaching and learning

- Teaching hall (data show, white board).
- Equipped laboratory of veterinary medical diagnosis (Medical stethoscope and thermometer- Ultrasonography- Electrocardiograph (ECG)).
- Samples of veterinary drug.
- Veterinary hospital
- Educational farm for conducting the clinical examination of animals

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