





# Specification for Small Ruminant Medicine course 2019/2020

### A-Affiliation

1.	Relevant program	Bachelor of Veterinary Medical Science (BVMSc)
2.	Department offering the course	Animal Medicine (Internal 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	Small Ruminant and Camel Medicine
2.	Course code	503 (A) III
3.	Level	5 <sup>th</sup> year
4.	Semester	First 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 small ruminant and camel diseases that are most commonly affecting sheep, goat and camel in Egypt and their treatment.
- b- Conduct accurate diagnosis, differential diagnosis and treatment of these diseases in small ruminant. Diseases of digestive, skin, wool, urinary and metabolic disorders are of particular concern because of their relation to the milk, meat and wool production.

### 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- Describe the function and anatomy of different of small ruminant and camel
- a2- Define different diseases affecting small ruminant and camel.
- 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 small ruminant and camel.
- 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 small ruminant and







camel 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 small ruminant and camel.
- 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 mall ruminant and camelpractice.

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:**

Cou	irse ILOS	Program ILOS
Α	Knowledge and understanding	a <sup>10</sup>
В	Intellectual skills	b <sup>7</sup>
С	Professional and practical skills	c <sup>3,5,9</sup>
D	General and transferable skills	d <sup>1,2,3,5</sup>

### **3.1-** Course contents:

Торіс	Lecture hours	Practical hours
General Medicine of small ruminant and camel	2	-
Diseases of digestive system in sheep and goat	4	-
Diseases of respiratory system in sheep and goat	4	-
Metabolic diseases in sheep and goat	2	-
Diseases of cardiovascular system in sheep and goat	2	-







Total	30	45
Laboratory examination of feces and ruminal juice	-	3
Clinical examination of skin of sheep and goat	-	4
Clinical examination of urinary system of sheep and goat	-	4
Clinical examination of nervous system of sheep and goat	-	4
Clinical examination of respiratory system of sheep and goat	-	6
Clinical examination of cardiovascular system of sheep and goat	-	3
Clinical examination of respiratory system of sheep and goat	-	3
Clinical examination of digestive system of sheep and goat	-	6
General examination of sheep and goat	-	9
Diseases of skin in camel	2	-
Diseases affecting urinary system and skin in camel	2	
Diseases affecting digestive and respiratory system in camel	6	
Diseases of skin in sheep and goat	2	-
Nutritional deficiency diseases in sheep and goat	2	-
Disease of urinary system in sheep and goat	2	-

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

Topic	A)	B)	C)	D)
	Knowledge and	Intellectual	Professional and	General and
	understanding	skills	practical skills	transferable
				skills
General Medicine of small ruminant and camel	a4, a6	b1, b2,b3, b4	c1, c2 , c3, c4	d1, d2,
Diseases of digestive	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2,
system in sheep and	a5, a7, a8	b4, b5	157	d3,d4,
goat	CAN			
Diseases of	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2,
respiratory system in	a5, a7, a8	b4, b5		d3,d4,
sheep and goat Metabolic diseases	a1 a2 a2	h1 h7 h2	c1, c2 , c3, c4, c5	d1, d2,
in sheep and goat	a1, a2, a3, a5, a7, a8	b1, b2,b3, b4, b5	$c_1, c_2, c_3, c_4, c_5$	d3,d4
Diseases of	a3, a7, a8 a1, a2, a3,	b1, b2,b3,	c1, c2 , c3, c4, c5	d1, d2, d3,
cardiovascular	a1, a2, a3, a5, a7, a8	b1, b2, b3, b4, b5	(1, 12, 13, 14, 13)	d4
system in sheep and	as, a/, ao	04, 03		u4
goat				
Disease of urinary	a1, a2, a3,	b1, b2,b3,	c1, c2, c3, c4, c5	d1, d2, d3,
system in sheep and	a5, a7, a8	b4, b5		d4
goat	, ,	,		
Nutritional	a1, a2, a3,	b1, b2,b3,	c1, c2 , c3, c4, c5	d1, d2, d3,
deficiency diseases	a5, a7, a8	b4, b5		d4,







in sheep and goat				
Diseases of skin in	a1, a2, a3,	b1, b2,b3,	c1, c2 , c3, c4	d1, d2, d3,
sheep and goat	a5, a7, a8	b4, b5		d4
Diseases affecting	a1, a2, a3,	b1, b2,b3,	c1, c2 , c3, c4	d1, d2, d3,
digestive and	a5, a7, a8	b4, b5		d4
respiratory system in				
camel				
Diseases affecting	a1, a6	b1, b2,b3,	c1, c2 , c3, c4	d1, d2, d3,
urinary system and		b4, b5		d4,d5
skin in camel				
Diseases of skin in	a1, a2, a3	b1, b2,b3,	c1, c2 , c3, c4	d1, d2, d3,
camel		b4, b5		d4,d5
General examination	a1, a2, a3, a5	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
of sheep and goat		b4, b5		d4,d5
Clinical examination	a1, a2, a3, a5	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
of digestive system		b4, b5	, , , ,	d4,d5
of sheep and goat				
Clinical examination	a1, a2, a3 <mark>, a</mark> 5	b1, b2,b3,	c1, c2, c3, c4	d1, d2, d3,
of respiratory system		b4, b5		d4,d5
of sheep and goat	1.	,	0	,
Clinical examination	a1, <mark>a2, a3</mark> , a5	b <mark>1, b2,</mark> b3,	c1, c2, c3, c4	d1, d2, d3,
of cardiovascular		b4, b5		d4,d5
system of sheep and	/ 9 /			<i>,</i>
goat				
Clinical examination	a1, a2, a3, a5	b <mark>1, b2,b</mark> 3,	c1, c2 , c3, c4	d1, d2, d3,
of respiratory system		b <mark>4, b5</mark>		d4,d5
of sheep and goat				
Clinical examination	a1, a2, a <mark>3, a5</mark>	b1, b2,b3,	<mark>c1, c</mark> 2, c3, c4	d2, d3
of nervous system of		b4, b5		1
sheep and goat				

## 4- Teaching, learning and assessment methods:

				Teach					assessment method					
ILOs		Learning methods												
		L	P&M	D	Р	Ps	Bs	Ft	semester	midterm	oral	practical	written	
	a1	х	х	Х	0	0	Х	0	Х	X	Х	0	Х	
and ing	a2	Х	х	Х	0	0	X	0	X	Х	Х	0	Х	
e al Idin	a3	х	х	Х	0	0	Х	0	Х	Х	Х	0	Х	
edg stan	a4	Х	х	Х	0	0	Х	0	Х	Х	Х	0	Х	
Knowledge and understanding	a5	х	х	Х	0	0	Х	0	Х	0	Х	0	Х	
Kn un	a6	Х	Х	Х	0	0	Х	0	Х	0	Х	0	Х	
	a7	X	х	Х	0	0	Х	0	Х	0	Х	0	Х	
	a8	X	х	Х	0	0	Х	Х	Х	0	Х	0	Х	
ıal	b1	X	х	Х	0	Х	Х	Х	Х	Х	Х	0	Х	
<u>llectu</u> kills	b2	X	х	Х	0	Х	Х	Х	Х	Х	Х	0	Х	
Intellectual skills	b3	х	Х	Х	0	Х	Х	Х	Х	Х	Х	0	Х	
Int	b4	Х	Х	Х	0	Х	Х	Х	Х	Х	Х	0	Х	
	b5	Х	Х	Х	0	Х	Х	Х	Х	0	X	0	Х	

الفرقة الخامسة- الفصل الدراسي الأول - 4 -







	b6	Х	Х	Х	0	Х	Х	Х	Х	0	Х	0	Х
nai cal	c1	0	х	Х	Х	Х	0	Х	Х	0	Х	Х	0
practical	c2	0	х	Х	Х	Х	0	Х	Х	0	Х	Х	0
	c3	0	х	Х	Х	Х	0	Х	Х	0	Х	Х	0
and	c4	0	х	Х	Х	Х	0	Х	Х	0	Х	Х	0
	c5	0	х	Х	Х	Х	0	Х	Х	0	Х	Х	0
skill	d1	X	Х	Х	0	0	Х	Х	Х	0	Х	Х	0
	d2	0	0	Х	0	Х	Х	Х	Х	0	Х	Х	0
era	d3	0	0	0	Х		0	Х	Х	0	Х	0	0
General	d4	0	х	Х	Х	Х	0	0	Х	0	Х	0	0
0	d5	0	0	0	Х	X	0	0	Х	0	Х	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:

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

### 6.2- Essential books (text books)

- Philip R Scott (2010) Sheep Medicine.
- Richard W. Nelson (2009) Small Animal Internal Medicine.
- Michael D. Lorenz, T. Mark (2009) Small animal medical diagnosis

### 6.3- Recommended books

- Course note.
- Richard W. Nelson (2009) Small Animal Internal Medicine.
- Michael D. Lorenz, T. Mark (2009) Small animal medical diagnosis.

### 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
- <u>http://www.ivis.org</u>
- <u>http://www.merckvetmanual.com/mvm/index.jsp</u>







- <u>www.drghanem.co.nr</u>
- <u>www.ekb.eg</u>

### 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

### Course coordinator: Prof. Dr. YASSEIN MAHMOUD ABD AL-RAOF.

### Head of department PROF. DR. FAISEL KHALIL ARNAOUT

Signature .....

Date 1/10/2019

