



## Infectious Diseases

### Diploma COURSE SPECIFICATION

#### A. BASIC INFORMATION

<b>University:</b>	<b>Sadat City</b>
<b>Faculty:</b>	<b>Veterinary Medicine</b>
<b>Program on which the course is given:</b>	<b>Diploma of Farm Animal Diseases</b>
<b>Department offering the Course:</b>	<b>Medicine and Infectious Diseases</b>
<b>Course code:</b>	<b>921</b>
<b>Course title:</b>	<b>Infectious Diseases</b>
<b>Lecture (hr/week):</b>	<b>2</b>
<b>Practical (hr/week):</b>	<b>2</b>
<b>Course coordinator:</b>	<b>Prof. Dr. Ahmed Zaghawa</b>

## **B. PROFESSIONAL INFORMATION**

### **1) Overall aims of course**

The aim of this course is to provide the diploma students with up- to- date basic information and knowledge about the common infectious diseases affecting different animal's species especially that conceding with the causes. They also understand the epidemiological patterns; pathogenesis, clinco- pathological features. Moreover, the students should have the ability of diagnosis, differential diagnosis, outline of treatment, control and prevention of these diseases in-between individual animal and farm level..

### **2) Intended learning outcomes of course (ILOs)**

#### **a) KNOWLEDGE AND UNDERSTANDING**

*By the end of this course, the graduate should be able to:*

- a.1. List the most common infectious disease affecting farm animals.
- a.2. Identify the frequency and distribution of farm animal infectious disease and factors determine such distribution.
- a.3. Clarify the impact of the farm animal infectious diseases on the animal public health and community.
- a.4. Recognize the pathogenesis and clinico-pathological and clinical character of infectious disease in farm animals.
- a.5. Describe the epidemiology of the farm animal infectious diseases.

#### **b) INTELLECTUAL SKILLS**

*By the end of this course, the student should be able to:*

- b.1. Investigate appropriate causes, epidemiological pattern, clinico-pathological features of farm animal infectious diseases.
- b.2. Discuss the primary and secondary evidence and arguments of the frequency and factors detriment of the distribution of farm animal infectious disease.
- b.3. Analyze the quantitative information of farm animal infectious diseases in graphs, figures, tables and equations and appropriate statistical tests.
- b.4. Plan a research task for diagnosis treatment, control and prevention of infectious disease in farm animals.
- b.5. Interpret the interaction between infectious agents including prions, virus, bacteria fungi and parasites and the farm animals.

#### **c) PROFESSIONAL AND PRACTICAL SKILLS**

*By the end of this course, the student should be able to:*

- c.1. Perform clinical assessment for diseased farm animals.
- c.2. Solve common clinical situation using appropriate problem solving skills and reverent ethical principle.
- c.3. Determine the principle and limitations of advanced practical techniques.
- c.4. Use appropriate basic laboratory equipment safely and efficiently.
- c.5. Apply appropriate experiments and sampling programs in the laboratory, bearing in mind technical, logistical safety and ethical limitations.

#### **d) GENERAL AND TRANSFERABLE SKILL**

*By the end of this course, the student should be able to:*

- d.1. join with team efficiently.
- d.2. Enhance the use of library services and IT tools.
- d.3. Improve computer / keyboard skills including word
- d.4. Create effective presentation.

### ۳) Topics and contents

Topic	No. of hours		
	Lectures	Practical	Total
1- Molecular epidemiology of bacterial and mycotic diseases of cattle and buffaloes.	12	-	12
- Molecular epidemiology of viral diseases of cattle and buffaloes.	14	-	14
3- Molecular epidemiology of parasitic diseases of cattle and buffaloes	8	-	8
4. Introduction and common term.	-	4	4
5. Sampling.	-	6	6
6. Diagnosis of parasitic diseases.	-	8	8
7. Diagnosis of protozoal diseases.	-	4	4
8. Diagnosis of mange.	-	4	4
9. Diagnosis of dermatophyte infections.	-	4	4
10- Diagnosis of mastitis.	-	8	8
11- Molecular epidemiology of equine infectious diseases	14	-	14
12- Molecular epidemiology of pet animal infectious diseases	12	-	12
13- Molecular epidemiology of sheep and goat infectious diseases	14	-	14
14- Molecular epidemiology of camel infectious diseases	14	-	14
15-Diagnosis of viral diseases	-	8	8
16-Diagnosis of bacterial diseases	-	8	8
17-Serological diagnosis	-	8	8
18-Molecular diagnosis	-	8	8
19-Mallien test	-	12	12
20-Principles of infectious diseases treatment	-	4	4
21-Antimicrobials	-	4	4
22-Anthelmintics drugs	-	4	4
23-Vaccination of farm and pet animals	-	6	6
	88	88	176

### ۴) Teaching and learning methods

- 4.1. Lectures.
- 4.2. Practical.
- 4.3. Self-learning activities.

## e) Student assessment

### a. METHODS:

1- Written examination	For assessment of knowledge, back calling and Intellectual skills
2- Practical examination	For assessment of practical and professional skill.
3- Oral examination	For assessment of knowledge and Intellectual skills
4- Student activities	For assessment of knowledge and general and transferable skills

### b. MATRIX ALIGNMENT OF THE MEASURED ILOS/ ASSESSMENTS METHODS:

	<b>K.U (a)</b>	<b>I.S (b)</b>	<b>P.P.S (c)</b>	<b>G.S (d)</b>
<b>Written exam</b>	<b>1,2,4,5</b>	<b>1,2,5</b>	<b>-</b>	<b>-</b>
<b>Practical exam</b>	<b>--</b>	<b>1,5</b>	<b>1-5</b>	<b>-</b>
<b>Oral exam</b>	<b>1,2,3,5</b>	<b>1,2,5</b>	<b>--</b>	<b>-</b>
<b>Student activities (assay, seminar, etc.)</b>	<b>3</b>	<b>3,4</b>	<b>--</b>	<b>1-4</b>

### c. WEIGHT OF ASSESSMENTS:

<b>Assessment</b>	<b>Allocated Mark</b>	<b>Evidence</b>
Final written exam	<b>50%</b>	Marked and signed written paper
Practical exam	<b>20%</b>	Marked and signed practical exam paper
Oral exam	<b>20%</b>	Signed list of oral exam marks
Student assignments	<b>10%</b>	Representative samples of presented materials

## f) List of references

### 6.1. Department notes:

Department theoretical books and practical manual.

### 6.2. Essential books

- ] Veterinary Medicine, A Textbook of the Diseases of Cattle, Sheep, Pig, Goats and Horses.
- ] Three course notes (Infectious diseases of cattle, infectious diseases of sheep, goats, dogs, cats and camels and practical note)..
- ] Veterinary Epidemiology.
- ] Clinical Veterinary Microbiology.
- ] Viral Diseases of Cattle.
- ] Handbook on Animal Diseases in Tropics.

- ) Veterinary Diagnostic Virology.
- ) A field manual of Camel Diseases
- ) Infectious Diseases of dog and Cat
- )

**6.3. Journals & websites:**

- ) Journal of infectious diseases.
- ) American Society of Microbiology
- ) Journal of Veterinary Microbiology
- ) Journal of Archives of Virology
- ) Vaccines Journal
- ) Emerging Infectious Diseases

	<b>Course coordinators</b>	<b>Head of department</b>
<b>Name</b>	<b>Prof. Dr. Ahmed Zaghawa</b>	<b>Prof. Dr. Ahmed Zaghawa</b>
<b>Signature</b>		

## Matrix alignment of course topics and ILOs

Topic	No. of hours			ILOs				T&L methods				
	Lectures	Practical	Total	K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)	Lect.	Pract.	Self & active learning	Audio visual	Case study
<b>Bacterial and mycotic diseases of cattle and buffaloes.</b>	12	-	12	1,2,3,4,5	1,2,3,4,5	-	-	√		√		
<b>Viral diseases of cattle and buffaloes.</b>	14	-	14	1,2,3,4,5	1,2,3,4,5	-	-	√		√		
<b>3- Parasitic diseases of cattle and buffaloes</b>	8	-	8	1,2,3,4,5	1,2,3,4,5	-	-	√		√		
<b>4. Introduction and common term.</b>	-	2	2	1,2,3,4,5	1,2,3,4,5	-	-	√		√		
<b>5. Sampling.</b>	-	2	2	-	-	1,2,3,4,5	1,2		√	√		
<b>6. Diagnosis of parasitic diseases.</b>	-	4	4	-	-	1,2,3,4,5	1,2		√	√		
<b>7. Diagnosis of protozoal diseases.</b>	-	4	4	-	-	1,2,3,4,5	1,2		√	√		
<b>8. Diagnosis of mange.</b>	-	4	4	-	-	1,2,3,4,5	1,2		√	√		
<b>9. Diagnosis of dermatophyte infections.</b>	-	4	4	-	-	1,2,3,4,5	1,2			√		
<b>10- Diagnosis of mastitis.</b>	-	4	4	-	-	1,2,3,4,5	1,2		√	√		
<b>11- Equine infectious diseases</b>	14	-	14	1,2,3,4,5	1,2,3,4,5	-	-	√		√		
<b>12- Molecular epidemiology of pet animal infectious diseases</b>	12	-	12	1,2,3,4,5	1,2,3,4,5	-	3	√		√		

<b>13- Sheep and goat infectious diseases</b>	<b>14</b>	<b>-</b>	<b>14</b>	<b>1,2,3,4,5</b>	<b>1,2,3,4,5</b>	<b>1,2,3,4,5</b>	<b>-</b>	√		√		
<b>14- Camel infectious diseases</b>	<b>14</b>	<b>-</b>	<b>14</b>	<b>1,2,3,4,5</b>	<b>1,2,3,4,5</b>	<b>1,2,3,4,5</b>	<b>-</b>	√		√		
<b>15-Diagnosis of viral diseases</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2</b>		√	√		
<b>16-Diagnosis of bacterial diseases</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2</b>			√		
<b>17-Serological diagnosis</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2</b>		√	√		
<b>18-Molecular diagnosis</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2,3</b>		√	√		
<b>19-Mallien test</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2</b>		√	√		
<b>20-Principles of infectious diseases treatment</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2</b>		√	√		
<b>21-Antimicrobials</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2,4</b>		√	√		
<b>22-Anthelmentics drugs</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2,4</b>		√	√		
<b>23-Vaccination of farm and pet animals</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1,2,3,4,5</b>	<b>1,2,4</b>		√	√		
<b>Total</b>	<b>176</b>	<b>88</b>	<b>88</b>									