

# University of Sadat City Faculty of Veterinary Medicine Dept. of Medicine and Infectious Diseases (2014-2015)



# Laboratory Animal Infectious Diseases (7°5M)

# **MVSc COURSE SPECIFICATION**

# A. BASIC INFORMATION

University:	Sadat City
Faculty:	Veterinary Medicine
Program on which the course is given:	Master in Veterinary Medical Sciences (Infectious Diseases)
Department offering the Course:	<b>Medicine and Infectious Diseases</b>
Course code:	735M
Course title:	<b>Laboratory Animal Infectious Diseases</b>
Lecture (hr/week):	1
Practical (hr/week):	2
Course coordinator:	Dr. Mohamed Nayel

### **B. PROFESSIONAL INFORMATION**

# 1) Overall aims of course

Upon successful completion of the course, the student will be able to Diagnose, treat infectious diseases.

# 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.** Realize the different causes of infectious diseases in laboratory animals.
- **a.2.** Be aware with clinical picture of laboratory animals infectious diseases.
- **a.3.** Explain the pathogenesis of Laboratory animals infectious diseases.
- **a.4.** Recognize different methods of diagnosis, treatment and control of laboratory animals infectious diseases.

### b) <u>Intellectual skills</u>

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

- **b.1.** Differentiate between different infectious diseases of laboratory animals.
- **b.2.** Select the most suitable and economic line of treatment.
- **b.3.** Write and evaluate clinical reports about laboratory animals infectious diseases.
- **b.4.** Plan a schedule for vaccination against infectious disease.

# c) Professional and practical skills

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

- **c.1.** Perform clinical examination and proper sampling from diseased laboratory animals.
- **c.2.** Master basic laboratory skills for diagnosis of laboratory animals bacterial, mycotic, parasitic and viral diseases.
- **c.3.** Apply basic molecular and serological techniques for diagnosis of laboratory animals infectious diseases.
- c.4. Apply prevention and control strategy for laboratory animals infectious diseases

# a) GENERAL AND TRANSFERABLE SKILL

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

- **d.1.** Manage scientific meetings and time.
- d.2. Manage research teams in the field of infectious diseases
- **d.3.** Involve in self and continuous learning.
- **d.4.** Communicate effectively.

### 3) Topics and contents

Topic	No. of hours					
	Lectures	Practical	Total			
1- Introduction and common term.	2	-	2			
2- Bacterial and mycotic diseases of laboratory animals.	18	-	18			
3- Viral diseases of laboratory animals.	14	-	14			
4- Parasitic diseases of laboratory animals.	10	-	10			

5. Sampling and primary examination of animals	-	10	10
6. Molecular tests for diagnosis of laboratory animals viral, bacterial and parasitic diseases.	-	20	20
7. Serological diagnosis of laboratory animals infectious diseases.	-	20	20
8. Allergic tests.	-	18	18
9- Treatment and vaccination of laboratory animals infectious diseases	-	20	20
	44	88	132

# 4) Teaching and learning methods

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

# 5) 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.</b> U (a)	<b>I.S</b> (b)	<b>P.P.S</b> (c)	<b>G.S</b> (d)
Written exam	a1-4	b1,2		
Practical exam		b1,3,4	c1-4	
Oral exam	a1-3	b1,2,4		
Student activities (assay, seminar, etc.)				1-4

# c. WEIGHT OF ASSESSMENTS:

Assessment	Allocated Mark	Evidence
Final written exam	50%	Marked and signed written paper
Practical exam		Marked and signed practical exam paper
Oral exam	50%	Signed list of oral exam marks
Student activities		Assay, presentations, discussions, review

# 6) List of references

### **6.1. Essential textbooks**

■ *Laboratory Animal Medicine:* 2 edition, Fox, James G.; Anderson, Lynn C.; Loew, Franklin M. & Quimby, Fred W., Elsevier (2002).

### **Recommended texts**

- Laboratory Animal Medicine, 2 edition, James G. Fox, Lynn C. Anderson, Franklin M. Loew, Fred W. Quimby, James G Fox, Academic Press; 2002
- Pathology of Laboratory Rodents and Rabbits, 3 edition, Dean H. Percy, Stephen W. Barthold, Wiley-Blackwell; 2007

### **6.3.** Periodicals and Web sites

J	Journal of the American Association for Laboratory Animal Science
Ĵ	IVIS
J	PubMed
S	cience direct

# 7) Science direct Facilities required for teaching and learning

- **7.1** Data-show.
- 7.2 Lab animals for clinical diagnosis.
- **7.3** Network for technology transfer.
- **7.4** Binocular Microscope for parasitic and Microbial identification.
- **7.5** Computer.

	Course coordinators	Head of department
Name	Dr. Mohamed nayel	Prof. Dr. Ahmed Zaghawa
Signature		

# Matrix alignment of course topics and ILOs

	No. of hours /week				-	ILOs			
Topic			Total hours	Hours for Lect.	Hours for Pract.	K.U	I.S	P.P.S	G.T.S
_	Lect.	Pract.				(a)	<b>(b)</b>	(c)	(d)
1- Introduction and common term.	1	-	2	2		1	1		1-4
2- Bacterial and mycotic diseases of laboratory animals.	1	-	18	18		1-4	1-4		1-4
3- Viral diseases of laboratory animals.	1	-	14	14		1-4	1-4		1-4
4- Parasitic diseases of laboratory animals	1	-	10	10		1-4	1-4		1-4
5. Sampling and primary examination of animals		2	10		10			1	1-4
6. Molecular tests for diagnosis of laboratory animals viral, bacterial and parasitic diseases.		2	20		20			2,3	1-4
7. Serological diagnosis of laboratory animals infectious diseases.		2	20		20			2,3	1-4
8. Allergic tests.		2	18		18			1,3	1-4
9- Treatment and vaccination of laboratory animals infectious diseases		2	20		20			4	1-4
Total			132	44	88				