University of Sadat City
Faculty of Veterinary Medicine
Dept. of Animal Hygiene and Zoonoses
(2014-2015)

Role of Rodents in Transmission of Zoonotic Diseases (779M)

1-Basic information	
Course Code:	**779M**
Course title :	**Role of Rodents in Transmission of Zoonotic Diseases**
Academic year:	**2014-2015**
Program title:	**Master in Veterinary Medical Sciences (Zoonoses)**
Department offering the Course:	**Department of Animal Hygiene and Zoonoses**
Contact hours/week/semester:	**Lecture: 2 hr/week**
	Practical: 2 hr/week
Course coordinator:	**Dr : Sherif Zidan**

2-Professional information

1- Overall aims of course

At completion this course, the students should know what is zoonoses. Types of zoonoses and their importance. Role of rodents in their occurrence.

They should know the most important zoonoses transmitted by rodents, their modes of transmission reservoirs and control measures.

2- Intended learning outcomes of course (ILOs)

a-Knowledge and understanding

By the end of this course the student should be get a basic knowledge about:-

A-1-Define the different terms of Zoonoses, communicable diseases, host- parasite relationship and the association between zoonoses and epidemiology.
A2-Outline the bacterial, , mycotic, and chlamydial zoonoses transmitted by rodents.
A3-Describe the role of rodents in maintenance and transmission of viral zoonoses.
A.4. summarize the role of vectors in occurrence of some zoonoses and role of hygiene on control of zoonoses
A/5-List the new emerging zoonoses transmitted by rodents.

b-Intellectual skills

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

B/1- Analyze data about occurrence, distribution and possible risk factors of diseases.
B /2-Judge the efficiency of farm hygiene in animal production farms.
B 3- Connect the occurrence of zoonoses with their natural hosts and reservoir and detect role of rodentsls in occurrence of diseases.
B /4- Investigate the hygienic problems among animal and human populations in contact with them to provide suitable means for control.
B 5-Identify the most important diseases affecting different animals and man. .

c-Professional and practical skills

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

C1- Determine the diseases of rodents.
C2-Examine the different methods for assessing the economic benefits of diseases control.
C3- Figure the diseases (Incidence, prevalence, ratio of clinical to sub-clinical cases, crude mortality, case fatality…….ect.).
C4- Collect samples from the affected populations for further investigations to ascertain the disease.
C/5-Demonstrate the different important zoonotic diseases affecting different types of animals and man.
C/6-Apply the basis of disease diagnosis in human and animal populations.

d-General and transferable skill

By the end of studying the course, the student should be able to

d.1. Work effectively as part of a team.
d.2. Facilitate the use of library facilities and IT tools.
d.3. Explore appropriate computer / keyboard skills including word.
d.4. Enhance the processing, spreadsheets, presentation packages and graph plotting.

1) Topics and contents

Topic	No. of hours		
	Lect.	Pract.	Total
Classification of zoonoses and common terms	**6**		**6**
Bacterial diseases transmitted through rodents e.g. human plague, leptospirosis , Listeriosis....etc (causative agent, sources, reservoir, mode of transmission , clinical features and prevention)	**22**		**22**
diagnosis of bacterial diseases		**24**	**24**
Viral diseases e.g. RVF, FMD,....etc (causative agent, sources, reservoir, mode of transmission , clinical features and prevention)	**20**		**20**
diagnosis of viral diseases		**24**	**24**
Parasitic diseases hydatid disease, hymenolepiasis....etc (causative agent, sources, reservoir, mode of transmission , clinical features and prevention)	**20**		**20**
diagnosis of parasitic diseases		**20**	**20**
Mycotic diseases Ring worm, favus,....etc (causative agent, sources, reservoir, mode of transmission , clinical features and prevention)	**20**		**20**
diagnosis of mycotic diseases		**20**	**20**
Total	**88**	**88**	**176**

4) Teaching and learning methods

Teaching and learning methods

4.1. Lectures.
4.2. Practical.

4.3. Self-learning activities.

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:

	K.U (a)	I.S (b)	P.P.S (c)	G.S (d)
Written exam	1,2,3,4,5,	1,3,4,5		-
Practical exam		2	1,2,3,4,5,6	-
Oral exam	1,2,3,4,5,	1,3,4		-
Student activities (assay, seminar, etc.)				**1-4**

5.3-Weight of assessments WEIGHT OF ASSESSMENTS:

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

6. List of References

6.1.Essential book

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Acha, P. N. and Szyfres, B. (2003): Zoonoses and Communicable diseases common to man and animals. PAHO, Sci. Tech. Pub.3rd ed. Volume I (Bacterial diseases).

James, H (1980): CRC Handbook series of Zoonose:VolumeII . CRC press. Inc. Boca, Raton,

Florida. International Standard book number 0-8493-2907-8 (vol II) Library of Congress card number 78-10696 printed in the United States. ISBN 0-8493-2907-8.

6.2. Recommended Books

Standard Methods for Examination of Water and Waste Water. A.P.H.A. (2005): Inc., Washington D.C., USA.

Mostafa, T.*H*. and Samaha, H.A. (1995): Zoonoses. Alexandria University.

W.H.O. (1992): Informal consutation on the Intestinal protozoan infections. WHO/CDs/IPI 92. 2,1-41.

67.4. Other Resources, websites, journal….

Journal of Clinical. Microbiology.

- ❖ Journal of vector borne zoonoses.
- ❖ Journal of Infection and Immunity.
- ❖ Journal of Hygiene.
- ❖ Journal of Animal Science.
- ❖ Journal of parasitology.
- ❖ Journal of Tropical Animal Health and Production.

- Microbiological Review Journal.
- Journal of Microbiology.

7- Facilities required for teaching and learning

7.1 Data-show.
7.2 Network for technology transfer.
7.3 Laboratory kits for experiments.
7.4 Computer.

	Course coordinators	Head of department
Name	Dr. Sherif Zidan	Prof. Dr. Ahmed Byomi
Signature		

779 MVSc Matrix alignment of course topics and ILOs

Topic	No. of hours /week		Total hours	Hours for lect.	Hours for pract.	ILOs				T&L. methods				
	Lect.	Pract.				K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)	Lect.	Pract.	Self & active leaning	Audio visual	Case study
Classification of zoonoses and common terms	**2**	**-**	**6**	**6**	**-**	**1**				+				
Bacterial diseases **diagnosis of bacterial diseases**	**2**	**2**	**46**	**22**	**24**	**2,4,**	**1,2,3,4**	**1,2,3,5**	**1,2**	+	+			
Viral Diseases: **diagnosis of viral diseases**	**2**	**2**	**44**	**20**	**24**	**2,3,4,5**	**1,2,4,5**	**1,2,3,5**	**1,3,4**	+	+			
Parasitic diseases **diagnosis of parasirtic diseases**	**2**	**2**	**40**	**20**	**20**	**2,3,4**	**25,**	**4,6**	**1,2,3,**	+	+			
Mycotic diseases **diagnosis of mycotic diseases**	**2**	**2**	**40**	**20**	**20**	**2**	**2,5**	**4,6**	**1,4**	+	+			