



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



Epidemiology of Animal and Bird Diseases (777P)

PhD COURSE SPECIFICATION

A. BASIC INFORMATION

University:	University of Sadat City
Faculty:	Veterinary Medicine
Program on which the course is given:	PhD in Veterinary Medical Sciences (Animal and Environment Hygiene)
Department offering the Course:	Animal Hygiene and Zoonoses
Course code:	777 p
Course title:	Epidemiology of animal and bird disease
Lecture (hour/week):	2
Practical (hour/week):	--
Course coordinator:	Prof. Dr. Ahmed Byomi

B. PROFESSIONAL INFORMATION

1) Overall aims of course

At completion this course, the veterinarian should be able to:

- Understand broadly what veterinary epidemiology is and the concepts of the interrelationships between agent- host-environment and interaction of disease determinants, herd immunity and the causation of diseases.
- Use the terms utilized in infectious disease epidemiology such as infection, incubation period, reservoir, vector, pathogenity and virulence.

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 terms of epidemiology, its types and uses. outline precisely the terms of epidemiology, its types and uses.

A.2 clarify the principals of prevention, control and eradication of diseases.

A.3 describe the Patterns of disease occurrence and factors affecting them.

A.4 recognize the Impact of good hygiene inside animal and poultry dwellings on controlling animal epidemics.

A.5 describe the danger of exotic contagious diseases and the different strategies for control and eradication.

A.6 explain How to make accurate estimation of the disease events which is helpful in successful control.

A.7 discuss the roots of infection and disease transmission for applying successful control and eradication of epidemics.

INTELLECTUAL SKILLS

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

B.1- analyze and interpret data about existence, distribution, transmission and possible risk factors of disease.

B.2- explain the different strategies for prevention, control and eradication of the diseases.

B.3- Investigate the disease in the field and connect the disease events with the possible causal factors.

B.4- interpret the suitable techniques for analysis of samples in a fast and simple manner.

B.5- detect preventive strategy against infectious diseases and evaluate the economic effects of diseases.

D) GENERAL AND TRANSFERABLE SKILL

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

C.1. Join effectively as part of a team.

c.2. Handle use of library facilities and IT tools.

c.3. Improve computer / keyboard skills including word

c.4. Arrange spreadsheets, presentation packages and graph plotting.

3) Topics and contents

Topics	No. of hours		
	Lecture	Tutorial/practical	Total
Common terms and policy of disease control and prevention	8	--	8
Veterinary epidemiology	10	-	10
-Uses and types of epidemiological investigations	10		10
-Patterns of disease occurrence and factors affecting them.	10		10
- Epidemiological triad and causation of diseases.	10	-	10
- Host- parasite relationship.	10		10

- Infectious disease occurrence.	10		10
- Types of host and vectors and Routes of infection and modes of transmission.	10		10
- counting of disease events	10		10
Total	88	--	88

4) Teaching and learning methods

4.1. Lectures.

4.2. Self-learning activities.

5) Student assessment

a. METHODS:

1- Written examination	For assessment of knowledge, back calling and Intellectual skills
2- Oral examination	For assessment of knowledge and Intellectual skills
3- Student activities	For assessment of knowledge and general and transferable skills

b. MATRIX ALIGNMENT OF THE MEASURED ILOs/ ASSESSMENTS METHODS:

Assessment method	K.U (a)	I.S (b)	G.S (d)
Written exam	1,4,5,7	1-5	-
Oral exam	1,2,3,	1,2,3,4	-
Student activities (assay, seminar, etc.)			1-4

c. WEIGHT OF ASSESSMENTS:

Assessment	Allocated Mark	Evidence
Final written exam	50%	Marked and signed written paper
Oral exam	30%	Signed list of oral exam marks

Student activities	20%	Assay, presentations, review
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6) List of references

6.1. Essential books

6.1.Essential books

- 1- Cullen, P.T.(2000):** Farm Animal Health. A practical Guides, 1st ed.
- 2- Dewi, A.P.; Axford, R. F. E.; Marai, I. F. M. and Omed, H. (1994):** Pollution in Livestock Production Systems. CAB International. Wallingford, UK.
- 3- Geer, B. K. (1980):** Animal Health. A Layman`s guide to disease control. 2nd ed. Interstate printers and Publishers, USA.
- 4- Gary, N. F. (1994):** Drinking water quality, Problems and solutions. Wiley Publishers, UK.
- 5- Last, A. M. (1983):** A Dictionary of Epidemiology. Oxford University Press, London
- 6-Standard Methods for Examination of Water and Waste Water. A.P.H.A. (2005):** Inc., Washington D.C., USA.Co. Sydney.
- 7- Lim, D. V. (1989):** Microbiology. West Publish. Co.St. Paul, USA.
- 8- Martin, S. W.; Meek, A. H. and Willeberg, P. (1987):** Veterinary Epidemiology. Principals and Methods. Iowa State University Press, Ames.
- 9- North, O. and Bell, D. (1990):** Commercial Chicken Production Manual. 4th ed. Chapman & Hall, New York, Ny, USA.
- 10- Linton, A. H.; Hugo, W. B. and Russell, A. D. (1987):** Disinfection in Veterinary and farm animal practice. Blackwell Scientific Publication Ltd.
- 11- Pepper, I. L.; Gerba, C. P. and Prussea, M. L. (1996):** Pollution Science. Academic Press, Inc., California, and USA.
- 12- Philips, C. J. C. (2001):** Principals of Cattle production. CABI Publishing,

Wallingford, UK.

6.2. Journals Web sites

- World Poultry Science Journal.
- Journal of Infection and Immunity.
- Journal of Hygiene.
- Journal of Animal Science.
- Journal of Dairy Animal Science.
- Journal of Poultry Science.
- British Poultry Science Journal.
- Journal of Tropical Animal Health and Production.

7) Facilities required for teaching and learning

- 7.1. Data-show.
- 7.2. Network for technology transfer.
- 7.3. Computer.

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

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)	IS (b)	P.P.S (c)	G.T.S (d)	Lect.	Pract.	Self & active leaning	Audio visual	Case study
Common terms and policy of disease control and prevention	2	-	8	-	8	1	1		1	+	-			
Veterinary epidemiology	2	-	10	-	10	2	1,2		1,2,	+	-			
Uses and types of epidemiological investigations	2	-	10	-	10	3	1		1,2,	+	-			
-Patterns of disease occurrence and factors affecting them.	2	-	10	-	10	1,2,4,	1		3,4	+	-			
Epidemiological	2	-	10	-	10	4	1		,3,4	+	-			

triad and causation of diseases.														
Host- parasite relationship.	2	-	10	-	10	5	2,3		1,2,3,	+	-			
Infectious disease occurrence.	2	-	10	-	10	5	4,5		1,	+	-			
Types of host and vectors and Routes of infection and modes of transmission	2	-	10	-	10	1,4,	1		3,4	+	-			
counting of disease events	2	-	10	-	10	6,7	3		1	+	-			

رئيس القسم العلمى: أ د احمد محمد بيومي

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