



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



Combating of Epidemic diseases (772P)

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:	772P
Course title:	Combating of Epidemic diseases
Lecture (hour/week):	2
Practical (hour/week):	2
Course coordinator:	Prof. Dr. Ahmed Byomi

B. PROFESSIONAL INFORMATION

1) Overall aims of course

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

- 1. Understand 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.**
- 2. Use the terms utilized in infectious disease epidemiology such as infection, incubation period, reservoir, vector, pathogenity and virulence.**
- 3. Know methods of infectious diseases control on the local, interstate and international levels.**
- 4. Succeed in application of preventative, and control measures and apply successful vaccination programs.**

2) Intended learning outcomes of course (ILOs)

a) KNOWLEDGE AND UNDERSTANDING

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

a.1 Outline precisely the basic terms of epidemiological investigation, its types and uses.

a.2 Discuss his advanced Knowledge about the principals of prevention, control and eradication of diseases.

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

A.4 Discuss precisely 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.

b) 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- Illustrate 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- Explain the suitable techniques for hygienic disposal of dead animal in a fast and simple manner.

C) PROFESSIONAL AND PRACTICAL SKILLS

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

C. 1- Apply vaccination programs in order to prevent entrance of diseases.

C.2- illustrate the diseases (Incidence, prevalence, ratio of clinical to sub-clinical cases, crude mortality, case fatality.....ect.).

C.3- Handle samples from the affected populations for further investigations to ascertain the disease.

C.4- Apply preventative and control measures for controlling spread of epidemic diseases.

D) GENERAL AND TRANSFERABLE SKILL

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

D1-join effectively as part of a team.

D2-handle library facilities and IT tools.

D3-improve computer / keyboard skills including word

D4-arrange spreadsheets, presentation packages and graph plotting.

3) Topics and contents

Topics	No. of hours		
	Lecture	practical	total
Common terms and policy of disease control and prevention	8	--	8

-Combating and Epidemiology of contagious diseases -sources of infection and Methods of prevention of epidemic diseases.	10	10	20
-- counting of disease events	5	10	15
- Measures used for combating contagious diseases	5	10	15
Host - parasite - relationship	10	-	10
- Notifiable diseases in animals and birds	10	-	10
- National and international regulations for controlling epidemic diseases	10	10	20
- Isolation and quarantine measures	10	10	20
- Concepts and application of vaccination programs.	5	10	15
- Quarantine law for imported animals, birds, products and by –products.	5	10	15
Hygienic disposal of dead animals	5	5	10

- Hygienic disposal of animal wastes	5	5	10
Total	88	80	168

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:

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

c. WEIGHT OF ASSESSMENTS:

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

6) List of references

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. Laboratory kits for experiments.
- 7.4. 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	+	-			
sources of infection and Methods of prevention of epidemic diseases.	2	2	30	10	20	2		1,3	1,2	+	+			
counting of disease events - Measures used for combating diseases.	2	2	20	10	10	3	1	2	1,2,3,4	+	+			
Notifiable diseases in animals and birds.	2	-	10	10		4	1	-	1,4	+	-			
National and international regulations for controlling epidemic diseases	2	-	10	10		5	2,3	-	1, 4	+	-			
Isolation and quarantine measures	2	2	30	10	20	5	1	4	1,2,	+	+			
Concepts and application of vaccination programs.	2	2	40	10	30	1,4,5	3	4	1,2	+	+			
- Quarantine law for imported animals, birds, products and by-products	2	-	10	10		1,4,5	3	-	1,2	+	-			
Hygienic disposal of dead animals	2	2	18	10	8	1,4,5	4	3	3,4	+	+			

