



## **Course specifications**

### **(Animal, Poultry and Environmental Hygiene 2)**

**Benha University**

**Faculty of Veterinary Medicine**

Programme on which the course is given: **Bachelor of Veterinary Medical Sciences**

Department offering the course: Department of Hygiene, Animal Behavior and management (Animal, Poultry and Environmental Hygiene)

Academic year/level : 5<sup>th</sup> Year

Date of specification approval Ministerial decree No. 921 on 15/ 9/ 1987 (approved in this template by the Department Council on 31/ 2/2006)

#### **A- Basic Information**

**Title:** Animal, Poultry and Environmental Hygiene (2)

**Code:** Vet00655b

**Lecture :** 3 hours/week

**Practical:** 4 hours/week

**Total:** 7 hours/week

#### **B- Professional Information**

##### **1- Overall aims of the course are to :**

- a. Provide the students with an advanced education in the field of poultry housing and hygienic measures to provide safe and comfortable environment for efficient production under different field and environmental conditions.
- b. Highlight the importance of hygienic measures of the farms and using of sanitizers, disinfectants and insecticides as an essential step in biosecurity programs.
- c. Stress on the effect of different environmental stressors on the animal health and measures for amelioration of their deleterious effect.
- d. Help the students to understand the basics of veterinary epidemiology
- e. The course also pays special attention to hygienic measures for carcass disposal during outbreaks, how to prepare and disinfect animal housing between batches and during outbreaks, quarantine measures, prevention and control of diseases and general measures for dealing with notifiable diseases.



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

### **a- Knowledge and understanding :**

After successful completion of the course, the students should be able to:

- a.1. Mention the general requirements for poultry housing
- a.2. Illustrate general layout of poultry farms for different production sectors
- a.3. Define different causes of stress and mention measures of amelioration
- a.4. Classify disinfectants, sanitizers and insecticides and explain their mode of action and their uses in the farm as a part of a biosecurity plan.
- a.5. Define the term used in veterinary epidemiology, tell the patterns of disease, and list the general principles for prevention and control of diseases.

### **b-Intellectual skills :**

After successful completion of the course, the students should be able to:

- b.1. Design a general layout for poultry farms .
- b.2. Choosing the appropriate system of housing and design according to type of production and environmental requirements and manage environmental stressors.
- b.3. Compare between different disinfectants for use under different field situation and housing systems, Interpret disinfection process.
- b.4. Conclude suitable methods for application of insecticides under different field conditions and plan a program for eradication of skin parasites.
- b.5. Evaluate the role of different environmental stressors in multifactorial diseases.

### **c-Professional and practical skills :**

After successful completion of the course, the students should be able to:

- c.1. Manage different poultry housing to provide the birds with their requirements under different field situations and for different types of production .
- c.2. Judge biosecurity measures applied in different animal farms .
- c.3. Evaluate the efficiency of different disinfectants .



**d-General and transferable skills :**

After successful completion of the course, the students should be able to:

- d.1.Be an active member in the team running large scale animal farms.
- d.2. Use the computer and Internet to search for information

**3- Contents:**

Topic	No. of hours	Lecture	Practical
<b>Poultry housing</b>			
Housing of poultry	13	5	8
Biosecurity programs for poultry farms	6	2	4
<b>Farm hygiene</b>			
Disinfection of animal buildings	16	4	12
The insecticides and eradication of skin parasites	12	4	8
Environmental stressors and animal welfare	14	6	8
Poisonous plants	20	-	20
<b>Veterinary Epidemiology</b>			
Common terms	2	2	-
Epidemiological investigations	2	2	-
Etiological agents	1	1	-
Disease transmission	2	2	-
Surveillance	1	1	-
Risk analysis	2	2	-
Preparedness	1	1	-
Prevention and control of contagious diseases	8	8	-
Notification	1	1	-
Qarantine	1	1	-
Hygienic disposal of carcass	3	3	-
<b>Total</b>	<b>105</b>	<b>45</b>	<b>60</b>



Content	ILOs			
	Knowledge and understanding	intellectual	Professional and practical	General and transferabl
<b>1- Housing of poultry</b>	<b>a.1,2</b>	<b>b.1,2</b>	<b>c.1</b>	<b>d.1,2</b>
<b>2- Biosecurity program of poultry farm</b>	<b>a.4</b>	<b>-</b>	<b>c.2</b>	<b>d.1,2</b>
<b>3- Disinfection of animal building.</b>	<b>a.4</b>	<b>b.3</b>	<b>c.11</b>	<b>d.1,2</b>
<b>4- Insecticide and eradication of skin parasite.</b>	<b>a.4</b>	<b>b.4</b>	<b>-</b>	<b>d.1,2</b>
<b>5- Environmental stressor and animal welfare.</b>	<b>a.3</b>	<b>b.5</b>	<b>-</b>	<b>d.1,2</b>
<b>6- Poisonous plant.</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>d.1,2</b>
<b>7- Veterinary Epidemiology.</b>	<b>a.5</b>	<b>-</b>	<b>-</b>	<b>d.1,2</b>

#### **4- Teaching and learning methods :**

- 4.1. . Lectures using data show in addition to the white board.
- 4.2. Laboratory for performing evaluation of different disinfectants .

#### **5- Student assessment methods:**

- 5.1. Practical exam.(final term) to assess professional and practical skills
- 5.2.Oral exam.(final term) to assess knowledge, information and intellectual skills
- 5.3.Written exam. (final term) to assess knowledge, information and intellectual skills



5.4. Semester work including quiz, written exams, essay and/or an assignment to design poultry housing for farm animals to assess knowledge, intellectual and general skills.

**Assessment schedule :**

Assessment 1	Practical examination	Week 13
Assessment 2	Oral examination	Week 15
Assessment 3	Written examination	Week 15
Assessment 4	Semester work	Week 4, 8, 12

**Weighting of assessments :**

Final- term examination	50	%
Oral examination	20	%
Practical examination	20	%
Semester Work	10	%
Other types of assessment	0	%
<b>Total</b>	<b>100</b>	<b>%</b>

**6- List of references:**

6.1. Essential books (text books)

- Veterinary Clinical Epidemiology: A Problem- Oriented Approach (1995)/ by Roland D. Smith, 2<sup>nd</sup> ed. CRC Press, Inc.
- Livestock Health and Housing (1979): David Sainsbury and Peter Sainsbury. Cassell Ltd, London.
- Essential Environmental Science (1996): Simon Watts and Lyndsay Halliwell. TJ Press (Padstow\_ Ltd, Padstow, Cornwall.

6.3. Recommended books

- Farm animal and the environment (1992): Clive Philips and David Piggins. C.A.B. International. UK.



- Disinfection in Veterinary and Farm Animal Practice (1987): A.H. Linton, W.B. Hugo and A.D. Russell. MacMillan India Ltd, Bangalore.
- Veterinary Epidemiology (1995): Michael Thrusfield, Blackwell Science Ltd.
- Risk Assessment and Management Handbook (1996): Rao V. Kollurn, Steven M. Bartell, Robin M. Pitlido and R. Scott Stricoff. McGraw- Hill Inc, USA.

**7- Facilities required for teaching and learning**

- Laboratory.
- Suitable Media for evaluation of the disinfection process
- Instruments and equipments for evaluation of the disinfectant and disinfection process.
- Data- show and computer lab.

**Course coordinators:**

**Professor Dr. Mona Ashoub**

**Head of Department: Professor Dr. Mona Ashoub**

**Date:**