# Specification for Animal, Poultry and Environmental Hygiene course 2019/2020

## A-Affiliation

| | | |
|---|---|---|
| **1.** | **Relevant program** | Bachelor of Veterinary Medical Science (BVMSc) |
| **2.** | **Department offering the course** | Animal hygiene and veterinary Management |

**Date of specification approval**: ministerial decree No. 1727 on 26/4/2017
**(**Approved in this template by the department council on 1/10/2019**)**

## B-Basic information

| | | |
|---|---|---|
| **1.** | **Course title** | Animal, Poultry and Environmental Hygiene |
| **2.** | **Course code** | 415 (B) I |
| **3.** | **Level** | 4th year |
| **4.** | **Semester** | Second term |
| **5.** | **Total hours/week** | 5 |
| **6.** | **Lecture hours/week** | 2 |
| **7.** | **Practical hours/week** | 3 |

## C-Professional Information

**1- Course learning objectives**

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**.**

**2- Intended learning outcomes of the 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 have the following skills

d1- Work under pressure and / or contradictory condition in contain codes

d2- Communicate verbally and non-verbal with lecturers and class-mates

d3- Function in a multidisciplinary team during conducting a research paper.

d4- Search skill.

d5- Interact with other graduates all over the world.

d6- presentation skill.

**3- Course contribution in the program ILOs:**

| Course ILOS | | Program ILOS |
|---|---|---|
| A | **Knowledge and understanding** | $a^{12,13}$ |
| B | **Intellectual skills** | $b^{11,13}$ |
| C | **Professional and practical skills** | $c^{12}$ |
| D | **General and transferable skills** | $d^{1,2,3,5,6}$ |

**3.1- Course contents:**

| **Topic** | **Lecture hours** | **Practical hours** |
|---|---|---|
| **Poultry housing** | | |

| | | |
|---|---|---|
| Housing of poultry | 2 | 9 |
| Biosecurity programs for poultry farms | 2 | 3 |
| **Farm hygiene** | | |
| Disinfection of animal buildings | 6 | 9 |
| The insecticides and eradication of skin parasites | | 6 |
| Environmental stressors and animal welfare | | 6 |
| Poisonous plants | - | 12 |
| **Veterinary Epidemiology** | | |
| Common terms | 2 | - |
| Epidemiological investigations | 2 | - |
| Etiological agents | 6 | - |
| Disease transmission | | - |
| Surveillance | | - |
| Risk analysis | 2 | - |
| Preparedness | | - |
| Prevention and control of contagious diseases | 4 | - |
| Notification | 2 | - |
| Qarantine | | - |
| Hygienic disposal of carcass | 2 | - |
| Total | **30** | **45** |

**The midterm and practical exams are included during the semester**

**3.2- ILOs matrix:**

| Topic | A) Knowledge and understanding | B) Intellectual skills | C) Professional and practical skills | D) General and transferable skills |
|---|---|---|---|---|
| Housing of poultry | **a1, a2, a3, a4, a5** | - | c1,c2,c3 | d1 |
| Biosecurity programs for poultry farms | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| Disinfection of animal buildings | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| The insecticides and eradication of skin parasites | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| Environmental stressors and animal welfare | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| Poisonous plants | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| Common terms | **a1, a2, a3, a4, a5** | - | - | d2 to d6 |
| Epidemiological investigations | **a1, a2, a3, a4, a5** | **b1, b2, b3,b4,**b5 | c1,c2,c3 | d2 to d6 |
| Etiological | **a1, a2, a3, a4,** | **b3,b4,** b5 | c3, | d2 to d6 |

| | | | | |
|---|---|---|---|---|
| agents | **a5** | | | |
| Disease transmission | **a1, a2, a3, a4, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Surveillance | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Risk analysis | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Preparedness | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Prevention and control of contagious diseases | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Notification | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Qarantine | **, a3, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |
| Hygienic disposal of carcass | **, a3, a4, a5** | **b3,b4,** b5 | c1,c2,c3 | d2 to d6 |

## 4- Teaching, learning and assessment methods:

| ILOs | | Teaching and Learning methods | | | | | | | assessment method | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | P&M | D&S | P | Ps | Bs | I | semester | midterm | oral | practical | written |
| Knowledge and understanding | a1 | x | x | x | **0** | **0** | x | 0 | x | x | x | **0** | x |
| | a2 | x | x | x | **0** | **0** | x | 0 | x | x | x | **0** | x |
| | a3 | x | x | x | **0** | **0** | x | x | x | x | x | **0** | x |
| | a4 | x | x | x | **0** | **0** | x | x | x | x | x | **0** | x |
| | a5 | x | x | x | **0** | **0** | x | x | x | **0** | x | **0** | x |
| Intellectual skills | b1 | x | x | x | **0** | x | x | x | x | x | x | **0** | x |
| | b2 | x | x | x | **0** | x | x | x | x | x | x | **0** | x |
| | b3 | x | x | x | **0** | x | x | x | x | x | x | **0** | x |
| | b4 | x | x | x | **0** | x | x | x | x | x | x | **0** | x |
| | b5 | x | x | x | **0** | x | x | x | x | x | x | **0** | x |
| onal and practica | c1 | **0** | x | **0** | x | x | x | x | x | **0** | x | x | x |
| | c2 | **0** | x | **0** | x | x | x | x | x | **0** | x | x | x |
| | c3 | **0** | x | **0** | x | x | x | x | x | **0** | x | x | x |
| General skills | d1 | x | **0** | **0** | | **0** | **0** | **0** | x | **0** | x | **0** | x |
| | d2 | x | **0** | **0** | x | **0** | **0** | **0** | x | **0** | x | **0** | x |
| | d3 | x | x | **0** | x | **0** | **0** | **0** | x | **0** | x | **0** | x |
| | d4 | x | x | x | **0** | **0** | **0** | **0** | x | **0** | x | **0** | x |
| | d5 | | **0** | **0** | **0** | **0** | **0** | **0** | x | **0** | x | **0** | x |
| | d6 | | x | **0** | **0** | x | **0** | **0** | x | **0** | x | **0** | x |

L **:Lecture,** P&M**: Presentations & Movies,** D&S: **Discussions & Seminars** PT**: Practical training,** Ps: **Problem solving,** Bs: **Brain storming, I:imagination**

## 5- Assessment timing and grading:

| Assessment method | timing | grade |
|---|---|---|
| Mid-term exam and semester work | 6th week | 15 |
| Practical exam | 14th week | 20 |

| | | |
|---|---|---|
| oral exam | End of semester | 15 |
| Written exam | End of semester | 50 |
| total | | 100 |

## 6- List of references

### 6.1- Course notes:

A concise guide of animal and poultry hygiene edited by staff members

### 6.2- Essential books (text books)

- Andres Aland (2013) Livestock Housing
- P.K. Goel. (2009) Water Pollution
- Frank R. Theroux (2008) laboratory manual for chemical and bacterial analysis of water and sewage

### 6.3- Recommended books

- Course note
- Andres Aland (2013) Livestock Housing.
- Frank R. Theroux (2008) laboratory manual for chemical and bacterial analysis of water and sewage.

### 6.4- Periodicals, Web sites, . . . etc

- Veterinary Records.
- Benha veterinary medical journal
- www.OIE.int.org
- www.WHO.int.org
- www.cdc.org
- www.ekb.eg

## 7- Facilities required for teaching and learning

- Teaching hall (Data show and White board)
- Equipped Department laboratory (Instruments used for air sampling and detection of some pollutant, in addition to those used for determination of air temperature, humidity and air velocity)
- Farm animal education
- Laboratory animal unit.

**Course coordinator: Prof Dr. MONA ASHOUB**
**Head of department Prof Dr. SAEED EL-LITHY**

**Signature ……**

Date 1/10/2019