



Poultry Diseases Course Specification

Basic Information		
Course Code	OAPOD, OBPOD	
Course Title	Poultry Diseases	
Academic Year	Fifth	
Academic Program	Bachelor of Veterinary Sciences	
Hours/week	Lectures: 2	Practical: 2
Term	First & Second	

1. Course Aim

By the end of this course, students should have gained the basic knowledge, experience and practices required for the diagnosis and handling in diseases of chickens, turkeys, ducks and rabbits.

2. Intended Learning Outcomes

2.1. Knowledge and Understanding

By the completion of this course, the student should be able to

- 2.1.1. Identify the signs and lesions of different bacterial, viral, mycotic and parasitic diseases of poultry and rabbit under field conditions.
- 2.1.2. Write the descriptions for different Poultry and rabbit outbreaks.
- 2.1.3. Recognize the methods of transmission and epidemiology of poultry pathogens.
- 2.1.4. Discuss the interaction between the environmental conditions as ventilation, temperature, and quality of feed on the susceptibility to different diseases.

2.2. Intellectual Skills

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

- 2.2.1. Choose the most suitable drug for each disease based on severity, cost and efficiency.
- 2.2.2. Expect the interactions between different antibiotics under farm conditions.
- 2.2.3. Interpret the results of serological diagnostic tests for application in the field.
- 2.2.4. Differentiate between clinical pictures of diseases in the flocks.
- 2.2.5. Manipulate the situation during different poultry and rabbit outbreaks..

2.3. Practical and Professional Skill

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

- 2.3.1. Perform HI(Haemagglutination Inhibition test), ELISA, Sensitivity test and Egg inoculation.
- 2.3.2. Construct vaccine and medication programs for poultry and rabbits.
- 2.3.3. Perform postmortem examination for different bird species and rabbits.
- 2.3.4. Estimate the immune status of the flocks for future prevention of infections by using ELISA, HI and Neutralization tests.
- 2.3.5. Collect representative samples appropriate for laboratory diagnosis of mycoplasma, Enterobacteriaceae, Pasteurellaceae, Gram +ve bacteria and viruses.
- 2.3.6. Obtain a definite flock history from the poultry and rabbit flock owners.



- 2.3.7. Get a survey data from the veterinary authorities about severe new epidemics.
2.3.8. Know all precautions for drug administration.
2.3.9. Aware with all the management of hatchery hygiene and all disinfection procedures.
2.3.10. Perform field tests as Pullorum test for Salmonella and SPA for Mycoplasma.
2.3.11. Carry on different kinds of vaccinations as spray, injection, eye drop, etc

Υ,Σ. General and Transferable Skills

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

- 2.4.1. Deal ethically with faculty staff, colleagues and flock owners.
2.4.2. Utilize computer and internet facilities to build up a short essays and presentations.
2.4.3. Work in a multidisciplinary team.
2.4.4. Communicate with professional and discussion groups and colleagues.

Υ. Course Contents

First Semester

Topic	Total (hr)	Lectures (hr)	Practical (hr)	ILOS
Rapid summary for ILOS for the course of poultry diseases	1	1	-	
▪ Avian Influenza (AI)	3	3	-	2.1.1-2.1.2- 2.1.3- 2.1.4-2.2.4-2.3.2.- 2.3.3-2.3.4
▪ NewCastle Disease(ND)	2	2	-	2.1.3-2.1.4- 2.3.3- 2.3.4-2.3.6-2.3.7.- 2.3.11
▪ Pox virus, ILT	2	2	-	2.1.2-2.1.3- 2.1.4- 2.2.3-2.2.4-2.3.6.- 2.3.11
▪ Marek's	2	2	-	2.1.3-2.2.5- 2.3.1- 2.3.2-2.3.6
▪ IBD	2	2	-	2.1.4-2.2.3- 2.2.4- 2.2.5-2.3.6-2.3.7.- 2.3.11
▪ CAV, SHS	2	2	-	2.2.3-2.2.4- 2.2.5- 2.3.2-2.3.6-2.3.7
▪ Mycoplasmosis	3	3	-	2.2.2-2.2.4- 2.2.5- 2.3.2-2.3.4.-2.3.5- 2.3.8
▪ Pasteurellosis, Infectious coryza	2	2	-	2.2.1-2.2.2-2.2.4- 2.2.5-2.3.3-2.3.5.- 2.3.8
▪ Staphylococcosis, Streptococcosis, Pseudomonas	2	2	-	2.1.4-2.2.1- 2.2.2- 2.2.5-2.3.2-2.3.5.- 2.3.8
▪ Salmonellosis	2	2	-	2.1.4-2.2.1-2.2.2- 2.2.4-2.2.5-2.3.2.- 2.3.3-2.3.4



▪ Colibacillosis	2	2	-	2.2.4-2.2.5-2.3.2- 2.3.3.-2.3.4-2.3.5- 2.3.8
▪ Clostridial diseases	2	2	-	2.2.2-2.2.4-2.2.5- 2.3.2-2.3.5
▪ ORT	2	2	-	2.1.3-2.1.4-2.3.3- 2.3.4-2.3.5-2.3.8
▪ Psittacosis, Campylobacteriosis	2	2	-	2.2.5-2.3.2-2.3.3.- 2.3.4-2.3.5-2.3.8
▪ Case history	2	-	2	2.3.6
▪ Clinical examination	4	-	4	2.3.3-2.3.5
▪ PM examination	22	-	22	2.3.3-2.3.5
▪ Drug administration	2	-	2	2.3.7-2.3.8
▪ Student activities Field visits to poultry farms, veterinary campaigns in villages, making videos about farms by students, researches from the internet and the libraries, brain storming with students and opened discussions	-	-	-	2.4.1-2.4.2-2.4.3.- 2.4.4
▪ Total	60	30	30	

Second Semester

Topic	Total (hr)	Lectures (hr)	Practical (hr)	ILOS
▪ Coccidiosis	2	2	-	2.1.2-2.1.4-2.2.4- 2.3.3
▪ Mycotic infection (Aspergillosis, candidiasis, Dermatophytosis)	2	2	-	2.1.2-2.1.3-2.2.2- 2.2.4-2.3.3-2.3.5- 2.3.8
▪ Rabbit diseases	4	4	-	2.1.1-2.1.2-2.1.4- 2.2.5-2.3.3
▪ IB	2	2	-	2.1.2-2.1.3-2.2.5- 2.3.5-2.3.7-2.3.11.
▪ Miscellaneous conditions	2	2	-	2.1.4-2.2.4-2.3.3
▪ Leukosis	4	4	-	2.2.3-2.2.4-2.2.5- 2.3.4.-2.3.7-2.3.11
▪ Duck viral diseases	2	2	-	2.1.1-2.1.2-2.1.3- 2.2.4-2.3.4
▪ AE, Pneumovirus, Reovirus	2	2	-	2.2.5- 2.3.1-2.3.2- 2.3.6-2.3.7
▪ Adenoviruses	2	2	-	2.1.3- 2.1.4-2.3.3- 2.3.5-2.3.11



▪ Mycotoxicosis (Aflatoxicosis, Fusariotoxicosis, Ochratoxicosis)	2	2	-	2.1.1- 2.1.4-2.3.4
▪ Internal and external parasitic diseases	2	2	-	2.1.2- 2.1.4-2.2.4
▪ Nutritional Disorders: Vitamin and mineral deficiency	4	4	-	2.1.4- 2.2.4-2.3.3
▪ HI test	2	-	2	2.3.1- 2.3.2-2.3.4
▪ ELISA	2	-	2	2.3.2- 2.3.4
▪ Pullorum test, Serum plate agglutination test for MG	2	-	2	2.3.10
▪ Isolation and identification of Mycoplasma	2	-	2	2.3.3-2.3.5
▪ Isolation and identification of enterobacteriaceae	2	-	2	2.3.3-2.3.5
▪ Methods of vaccination	2	-	2	2.3.2-2.3.11
▪ Disinfection and biosecurity	2	-	2	2.3.7-2.3.9
▪ Hatchery hygiene	2	-	2	2.3.9
▪ PM examination (divided across the term)	14	-	14	2.3.3.-2.3.5
▪ Student activities Field visits to poultry farms, veterinary campaigns in villages, making videos about farms by students, researches from the internet and the libraries, brain storming with students and opened discussions	-	-	-	2.4.1-2.4.2-2.4.3.- 2.4.4
Total	60	30	30	
Total (T semesters)	120	60	60	

* Contents sharing in the achievement of the intended learning outcomes; KU (knowledge and understanding), IS (intellectual skills), PPS (practical and professional skills) and GT (general and transferable skills).

Course Matrix for achievement of Intended Learning Outcomes

	Topics	Hours	Knowledge & Understanding				Intellectual Skills					Practical & Professional Skills											General & Transferable Skills			
			1	2	3	4	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4
1	Viral Diseases	22	X	X	X	X			X	X	X	X	X	X	X	X	X				X					
2	Bacterial Diseases	17			X	X	X	X		X	X		X	X	X	X			X							
3	Mycotic Diseases	4	X	X	X	X		X		X			X	X	X			X								
4	Parasitic Diseases	4		X		X				X			X													
5	Rabbit Diseases	4	X	X		X				X			X													
6	Duck Diseases	2	X	X	X					X				X												
7	Nutritional Diseases	4				X				X			X													
8	Practical course	60										X	X	X	X	X	X	X	X	X	X					
9	Miscellaneous Conditions	2				X				X			X													
10	Student activities																					X	X	X	X	

Σ. Teaching and Learning Methods

- 4.1. Lectures to gain knowledge and understanding skills.
- ξ,ϒ Practical sessions for the students to gain practical skills.
- ξ,ϒ field trips to the poultry production farms, for observation of the infected birds, PM examination and laboratory testing.
- ξ,ξ Seminars about practical course
- 4.5 self directed learning skills.
- 4.5.1. Analyze the results and reach specific conclusion.
- 4.5.2. Writing a review paper to gain the skills of self-learning and presentation
- 4.5.3. Sample collection, preservation, examination and identification.

Ο. Teaching and Learning Methods for Students of Limited Capabilities

- Activating office hours.
- Additional revisions for previously taught and difficult topics.
- Providing a summary for previous chapter at the end of each one.
- Following up student feedbacks.

ϒ,ϒ. Methods	ϒ. Student Assessment			
	Intended Learning Outcomes Covered			
	KU	IS	PPS	GTS
Written exams	2.1.1/2.1.2/ 2.1.3/ 2.1.4	2.2.1/2.2.2/2.2.3/2.2.4/ 2.2.5		
Practical exams			2.3.1/2.3.2/2.3.3/ 2.3.4/2.3.5/2.3.6/2.3.7/ 2.3.8/2.3.9	
Oral exams		2.2.1/2.2.2/2.2.3/2.2.4/ 2.2.5		2.4.1/2.4.2/2.4.3/2.4.4
Student activities				2.4.1/2.4.2/2.4.3/ 2.4.4

KU, knowledge and understanding; IS, intellectual skills; PPS, practical and professional skills; GTS, general and transferable skills.

ϒ,ϒ. Exam Descriptio

- Written exams
- Short essays.
 - Drawings.
 - Multiple choice questions.
 - True or false.
 - Comparisons.
 - Giving the scientific term/information.

Practical exams	<ul style="list-style-type: none"> • PM examination of dead birds from field cases • Killing of live diseased birds. • Description of diseased organs. • Brief writing of laboratory tests (HI, ELISA, SPA tests) .
Oral exams	<ul style="list-style-type: none"> • The exam committee involves at least 3 examiners. Each evaluates the student by giving a separate score. The scores are then averaged. • Examiners are provided with the course specification. • The student randomly selects question cards.
Student activities	<ul style="list-style-type: none"> • Self-learning activities are evaluated throughout the semester. For details, refer to the section: “Σ Teaching and Learning Methods”.

Exams and activities	Α,Υ. Assessment Schedule	Α,Σ. Weighing of Assessments	
	Week (in each semester)	Per semester	Total (%)
Semester work exam	4 th , 8 th and 12 th	7	14
Student activities	Throughout the semester	3	6
Final written exam	16 th	25	50
Final Practical exam	16 th	10	20
Final oral exam	16 th	5	10
Total		50	100

V. List of References

V, 1. Course Notes

Departmental notes

V,Υ. Essential Book

- Y.M.Saif, A.M.Fadly, J.R.Glisson, L.R. McDougald, L.K. Nolan, D.E. Swayne (2008): Diseases of poultry 12th edition Blackwell publishing, Iowa State University Press, Iowa, Ohio, USA.
- Frank Jordan, Mark Pattison, Dennis Alexander, Trevor Faragher, Dennis J. Alexander (2002): Poultry Diseases 8th edition W B Saunders publishing.

V,Υ. Recommended Books

- E.J.Woertley (2002): Poultry Diseases, Causes, Symptoms, and Treatment with notes on PM examination. Kent Press Publisher
- Colin G. Scanes, George Brant, M. E. Ensminger (2002): Poultry Science, 8th ed. Prentice Hall Publisher
- Victor Roberts (2002): New Diseases of Free Range Poultry , 1st ed. Whittet Books Ltd Publisher.

V,Σ. Periodicals, websites, etc.

Scientific Journals

- Avian Diseases
- Avian Pathology.
- Poultry Science.
- International journal of Poultry Science .

Scientific websites

- <http://www.thepoultrysite.org>
 - <http://www.poultrymed.org>
 - <http://edis.ifas.ufl.edu/psoΣΣ>
 - <http://www.pubmed.org/>
 - <http://www.sciencedirect.com/>
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Date:

Head of Department:

Prof. Dr. Hany Fawzy Ellakany

Date: