Beni-Suef University
Faculty of Veterinary Medicine
Department of Poultry Diseases

Program Specification for PhD Degree
2017-2018

A-Basic information:

1- **Course title:** *PhD VSC.* **Specialty:-** Poultry Diseases
2- **Program type:** *Single*
3- **Department offering program:** Department of Poultry Disease
4- **Academic year:** 2017-2018
5- **Approval date of Department Council:**
6- **Approval date of Faculty Council:**
7- **External evaluator:** Prof. Dr. Youssef Ibrahim Youssef

B-Professional information:

1- Overall aims of the program:

1- Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.
2- Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.
3- Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.
4- Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.
5- Self-development and continuous learning and transfer the acquired knowledge and experience to others.

6- Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

By the end of this PhD program the graduate should be able to:

a.1. Acquire up to date theories and knowledge in the field of poultry and rabbit diseases and related sciences.
a.2. Perceive advanced scientific research principles, regulations, ethics and its different tools.
a.3. Identify the legal and moral rules in different poultry and rabbit diseases diagnostic, preventive and control practices.
a.4. Understand the principles and importance of high quality practices in development of poultry industry.
a.5. Be aware of his role in community development and environment protection.

b- Intellectual capacity:

By the end of this PhD program the graduate should be able to:

b.1. Analyze and evaluate knowledge related to poultry and rabbit diseases and interpret it to solve the related problems.
b.2. Solve problems affecting poultry and rabbit husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the poultry and rabbit science.
b.4. Write scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of poultry and rabbit diseases.
b.6. Properly plan for performance enhancement in diagnosis, prevention and control of poultry and rabbit diseases.
b.7. Take decisions using the available information in different practices related to poultry and rabbit diseases.
b.8. Accept and improve innovation and creativity.
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

By the end of this PhD program the graduate should be able to:

c.1. Perfectly perform different conventional and advanced techniques in the field of poultry and rabbit diseases.
c.2. Write and evaluate reports related to diagnosis of poultry and rabbit field cases.
c.3. Assess and improve different available tools and methods regarding diagnosis, prevention and control of poultry and rabbit diseases.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

On successful completion of this program the graduate should be able to:

d.1. Communicate effectively using different means and properly use the information technologies for development of his/her professional abilities.
d.2. Educate the others and evaluate their performance.
d.3. Perform self development and continuous learning and transfer the acquired knowledge and experience to others.
d.4. Utilize the resources to obtain knowledge and information.
d.5. Learn how to work effectively as part of a team and effectively lead teamwork.
d.6. Manage scientific meetings and discussions.
d.7. Properly manage the time.

7- Academic standers

* The faculty mission, vision and strategic objective are confirmed to the academic standard. The learning outcomes are inline with the department and the faculty mission.

* Postgraduates NARS (March 2009) Master degree chapter issued by national authority for quality assurance and accreditation of education (NAQAAE) and Veterinary medicine post graduate academic standards (ARS) for the faculty of veterinary medicine, Beni-Suef University, Beni-Suef, Egypt are selected to confirm the appropriateness of the academic standards .

ARS (National Academic Reference Standards) prepared by NAQAAE.

4- Curriculum Structure and Contents

A- Program duration: At least three academic years from the approval of registration by the Faculty Council and maximum five years. The faculty council has the right to give the applicant another period not exceed two years according to the supervisor request. The first year for preliminary courses study, while the second and third years for researches and preparation of the PhD Thesis.

B- Program structure: 3-5 preliminary courses

☒ **Hours/ week:**

Theoretical | 5-8 | Practical | 6-8 | Total | 11-16

C- Program courses

Code	Course title	Hours /week		Academic year	Teaching duration
		Theoretical	Practical		
Vary according to the selected course	Selected (3-5) courses depending on the thesis title from the various Faculty PhD courses other than specialty of the Master.	5-8	6-8	Preliminary year	36 weeks

D- Courses contents

See courses specification

5- Program Admission Requirements

* According to the Faculty of Veterinary Medicine, Beni-Suef University Bylaws for Post Graduate Programs, applicants should have a master degree in the specialization subject he will register in one of the Egyptian Universities or an equivalent degree from any approved university or another recognized scientific institute.

* According to Beni-Suef University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects:

1-English language (Toefl or equivalent degree)

* Admission to the program is open during March and September annually.

*The faculty council has the right to suspend the student enrolment for a certain period if he has acceptable excuse preventing him from continuing his study or research.

6. Regulations for Progression and Program Completion

After finishing the preliminary courses, the graduate student will be eligible to sit for the examination according to the following rules:

No. of course teaching hours/ week	Allowed written exam time	Degree	
		Theoretical	Practical and oral exam
≥ 3 hours	3 hours	50	50

≤ 3 hours	2 hours	25	25

-The faculty council has the right to deprive the applicant from entering the exams if his attendance of the courses is less than 75%.
-Failure or depriving from entering one or more course did not requires reexamination of successful passed courses.
-The applicant should submit a seminar within 2 years after registration about his research and specialization subject filed that accepted by a committee of professors and assistant professors (3 in number).
-the applicant should submit the thesis that accepted by the judging committee in an open discussion and the following polices should be met:

-pass all preliminary curriculums successfully.

-acceptance of the seminar presented by the applicant.

-The applicant should publish at least two scientific papers from the thesis in local or international journals

Qualification grades:

Excellent	≥ 90
Very good	≥80
Good	≥70
Pass	≥60
Failed	45 to less than 60 weak
	Less than 45 Very weak

After passing, the graduate starts research for Ph.D. Thesis at the beginning of the second year. The candidate will receive his degree after evaluating and approving the thesis by a committee according to University regulations.

7-Graduate student assessment

A: Assessment Tools

According the Faculty of Veterinary Medicine, Beni-Suef University Bylaws for Post Graduate, students should be assessed at the end of preliminary year and the thesis should be evaluated and approved by a committee after at least three years from registration date according to University regulations.

Preliminary year

Assessments methods for each course	**Practical exam**	**Oral exam**	**Written exam**
Time of Assessments	By the end of the year	By the end of the year	By the end of the year
Marks	25	25	50

Ph.D. Thesis:

The Ph.D. students should prepare a thesis in Animal, Poultry and Environmental hygiene. The

department and the ethical committees must approve the protocol of the research. The thesis includes a review part with a practical part. The thesis is supervised by two or more staff members and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee according to University regulations.

B- Matrix alignment of the measured ILOs

Assessments methods	Matrix alignment of the measured ILOs			
	K&U (a)	**I.S (b)**	**P&P. S (c)**	**G&T. S (d)**
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		d1-d2-d3-d4-d5-d6-d7

8- Evaluation of Program Intended Learning Outcomes

Evaluator	Tool	Sample
1. Post graduate students	Questionnaire at the end of the program	All the PG students
4. External evaluators	Review program and courses Attending the final exam	Once before implementation annual report
5. College Quality Assurance Committee	Annual program reviewer	

PhD Program Specification Matrix (Program ILOS with Academic standers ARS)

Academic standers / Program ILOs		Knowledge and understanding					Intellectual skills									Professional and practical skills					General and transferable skills						
		a1	a2	a3	a4	a5	b1	b2	b3	b4	b5	b6	b7	b8	b9	c1	c2	c3	c4	c5	d1	d2	d3	d4	d5	d6	d7
Knowledge and understanding	**a1**	√																									
	a2		√																								
	a3			√																							
	a4				√																						
	a5					√																					
Intellectual skills	**b1**						√																				
	b2							√																			
	b3								√																		
	b4									√																	
	b5										√																
	b6											√															
	b7												√														
	b8													√													
	b9														√												
Professional and practical skills	**c1**															√											
	c2																√										
	c3																	√									
	c4																		√								
	c5																			√							
General and transferable skills	**d1**																				√						
	d2																					√					
	d3																						√				
	d4																							√			
	d5																								√		
	d6																									√	
	d7																										√

Program aims – ILOS Matrix for the PhD program

مصفوفة اهداف البرنامج مع مخرجات التعلم المستهدفة

Program **ILOs**		**Program aims**				
		1. Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.	2. Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.	3. Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.	4. Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.	5. Self-development and continuous learning and transfer the acquired knowledge and experience to others.
Knowledge and understanding	a.1. Acquire up to date theories and knowledge in the field of poultry and rabbit diseases and related sciences.	√	√			√
	a.2. Perceive advanced scientific research principles, regulations, ethics and its different tools.	√	√	√		√
	a.3. Identify the legal and moral rules in different poultry and rabbit diseases diagnostic, preventive and control practices.		√		√	
	a.4. Understand the principles and importance of high quality practices in development of poultry industry	√	√		√	

Program **ILOs**		**Program aims**				
		1. Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.	2. Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.	3. Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.	4. Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.	5. Self-development and continuous learning and transfer the acquired knowledge and experience to others.
	a.5. Be aware of his role in community development and environment protection		√	√		√
Intellectual skills	b.1.Analyze and evaluate knowledge related to poultry and rabbit diseases and interpret it to solve the related problems.	√	√	√		
	b.2.Solve problems affecting poultry and rabbit husbandry and economics using the available data	√	√	√		
	b.3.Conduct research studies that add new knowledge to the poultry and rabbit science.	√	√	√		√
	b.4.Write scientific papers.	√			√	
	b.5.Asses different risk factors for each practice related to diagnosis, prevention and control of poultry and rabbit diseases.		√		√	√
	b.6.Properly plan for performance enhancement in	√	√		√	

Program **ILOs**		**Program aims**				
		1. Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.	2. Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.	3. Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.	4. Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.	5. Self-development and continuous learning and transfer the acquired knowledge and experience to others.
	diagnosis, prevention and control of poultry and rabbit diseases.					
	b.7.Take decisions using the available information in different practices related to poultry and rabbit diseases.		√		√	√
	b.8.Accept and improve innovation and creativity.	√		√		√
	b.9.Discuss and debate others using different facts and data	√	√	√		
Practical and professional skills	c.1. Perfectly perform different conventional and advanced techniques in the field of poultry and rabbit diseases.	√	√	√		
	c.2. Write and evaluate reports related to diagnosis of poultry and rabbit field √cases.	√			√	√
	c.3. Assess and improve different available tools and methods regarding diagnosis, prevention and control of poultry and		√		√	

Program **ILOs**		**Program aims**				
		1. Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.	2. Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.	3. Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.	4. Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.	5. Self-development and continuous learning and transfer the acquired knowledge and experience to others.
	rabbit diseases.					
	c.4. Properly use the suitable technologies to serve of his/her professional practices.	√		√	√	
	c.5. Enhance the performance of others through proper planning		√		√	√
General and transferable skills	d.1. Communicate effectively using different means and properly use the information technologies for development of his/her professional abilities.		√	√		√
	d.2. Educate the others and evaluate their performance.			√		√
	d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.		√		√	√
	d.4. Utilize the resources to obtain knowledge and	√		√	√	

Program **ILOs**		**Program aims**				
		1. Master the principles of scientific research and continuously to develop his/her knowledge in the field of poultry and rabbit diseases by applying recent analytical approaches to in poultry and rabbit diseases diagnosis, prevention and control.	2. Integrate the acquired knowledge about poultry and rabbit diseases with the other related sciences in the field of diagnosis, prevention and control of disease.	3. Master wide range of professional skills and techniques in diagnosis of poultry and rabbit diseases.	4. Make decisions depending on the available data in different professional and practical contexts and effectively can lead the team works and plan and steer the progress of research projects and improve the skills of writing dissertations and scientific papers.	5. Self-development and continuous learning and transfer the acquired knowledge and experience to others.
	information.					
	d.5. Learn how to work effectively as part of a team and effectively lead teamwork.	√		√	√	√
	d.6. Manage scientific meetings and discussions		√		√	√
	d.7. Properly manage the time.				√	√

PhD Program Specification Matrix
(Program Courses with ILOS)

Program ILOs		Courses
Knowledge and understanding	**a1**	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	a2	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	a3	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	a4	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	a5	Ph-170, Ph-171, Ph-172, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	a6	Ph-177, Ph-178 + thesis
	a7	Ph-177 + thesis
Intellectual skills	**b1**	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b2	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b3	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b4	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b5	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b6	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b7	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b8	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	b9	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
Professional and practical skills	**c1**	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	c2	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	c3	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	c4	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	c5	Ph-170, Ph-171, Ph-172, Ph-173, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
General and transferable skills	**d1**	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d2	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d3	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d4	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d5	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d6	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d7	Ph-170, Ph-171, Ph-172, Ph-173, Ph-174, Ph-175, Ph-176, Ph-177, Ph-178 + thesis
	d8	Ph-173, Ph-174, Ph-175, Ph-176 + thesis
	d9	Ph-174, Ph-175 + thesis

Programme coordinator:

Name

Signature **Date 02-10-2018**

Head of the Department:

Name

Signature **Date 02-10-2018**

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-170
Course title :	Bacterial Diseases of Poultry
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student is able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of bacterial diseases of poultry.
3. Identify the bacterial diseases facing poultry industry and find solutions.
4. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of bacterial diseases of poultry and other related sciences.
5. Integrate the acquired knowledge about bacterial diseases of poultry with the other related sciences and develop the relations in between.
6. Intensively aware the current problems of bacterial origin facing poultry industry and recent theories illustrating poultry and rabbit diseases diagnosis, prevention and control.
7. Master wide range of professional skills and techniques in diagnosis of bacterial diseases of poultry.
8. Develop the communication and IT skills effectively and leading the team works.
9. Properly employ the available resources and develop them and search for new ones.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Show awareness of his/her role in community development and environmental conservation in the area of poultry diseases in the light of global and regional variables.
12. Commit the moral and legal rules of poultry specialist.
13. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
14. Plan and steer the progress of research projects.
15. Improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date theories and knowledge related to bacterial diseases of poultry and related sciences.

a.2. Perceive advanced scientific research principles, regulations, ethics and its different tools.

a.3. Identify the legal and moral rules in different professional practices related to bacterial diseases of poultry.

Course specification of postgraduate

a.4. Understand the principles and importance of high quality practices in development of poultry industry.
a.5. Be aware of his role in community development and environment protection.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to bacterial diseases of poultry and interpret it to solve field problems.
b.2. Solve problems affecting poultry and rabbit husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the field of bacterial diseases of poultry.
b.4. Write scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of poultry and rabbit diseases.
b.6. Plan for diagnosis, prevention and control of bacterial diseases of poultry.
b.7. Take decisions using the available information in different practices related to bacterial diseases of poultry.
b.8. Accept and improve innovation and creativity.
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of bacterial diseases of poultry.
c.2. Write and evaluate reports related to diagnosis of field cases of bacterial origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of bacterial diseases of poultry.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

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

d.1. Communicate effectively using different means and properly use the information technologies for development of his/her professional abilities.
d.2. Educate the others and evaluate their performance.
d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.4. Utilize the resources to obtain knowledge and information.
d.5. Learn how to work effectively as part of a team and effectively lead teamwork.
d.6. Manage scientific meetings and discussions.
d.7. Properly manage the time and effectively lead teamwork.

Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Bacterial diseases causing septicemia in poultry	1-5	20	10	10
	Bacterial causes of upper respiratory infection in poultry	6-7	8	4	4
	Bacterial causes of lower respiratory infection in poultry	8-9	8	4	4
	Bacterial diseases affecting feed conversion in growing birds	10-11	8	4	4
	Bacterial diseases affecting egg production	12-15	16	8	8
	Bacterial diseases causing arthritis in poultry	16-17	8	4	4
	Bacterial diseases of waterfowls	18-19	8	4	4
	Bacterial diseases of turkey	20-22	12	6	6
	Egg-born bacterial diseases	23-25	12	6	6
	Role of bacteria in aggravating viral infection in poultry	26-27	6	4	2
	Immunity against bacterial diseases	27-30	10	6	4
	Advanced laboratory techniques (PCR, real-time PCR, Gene sequencing)	29-32	12	4	8
	Principles of biohazards and safety by work in labs	33-34	8	4	4
	Antimicrobial resistance in poultry and how to overcome	35-36	8	4	4
	Total		144	72	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:

Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1, a2, a3, a4, a5	b1, b2, b3, b4, b5, b6, b7, b8, b9		
Practical Exam		b1, b2, b3, b4, b5, b6, b7, b8, b9	c1, c2, c3, c4, c5	
Oral Exam	a1, a2, a3, a4, a5	b1, b2, b3, b4, b5, b6, b7, b8, b9		d1, d2, d3, d4, d5, d6, d7

Course specification of postgraduate

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator — **Dr. Salama Abohamra**

Head of Department — **Prof. Azza A. Sawah**

Course specification Matrix

	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	1	Bacterial diseases causing septicemia in poultry	1-5	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7
	2	Bacterial causes of upper respiratory infection in poultry	6-7	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Bacterial causes of lower respiratory infection in poultry	8-9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Bacterial diseases affecting feed conversion in growing birds	10-11	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Bacterial diseases affecting egg production	12-15	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Bacterial diseases causing arthritis in poultry	16-17	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Bacterial diseases of waterfowls	18-19	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Bacterial diseases of turkey	20-22	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Egg-born bacterial diseases	23-25	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Role of bacteria in aggravating viral infection in poultry	26-27	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	11	Immunity against bacterial diseases	27-30	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	12	Advanced laboratory techniques (real-time PCR, Gene sequencing)	29-32	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	13	Principles of biohazards and safety by work in labs	33-34	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	14	Antimicrobial resistance in poultry and how to overcome	35-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	1, 2, 3, 4	1,2,3	3, 4	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-171
Course title :	Viral Diseases of Poultry
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of viral diseases of poultry.
3. Identify the viral diseases facing poultry industry and find solutions.
4. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of viral diseases of poultry and other related sciences.
5. Integrate the acquired knowledge about viral diseases of poultry with the other related sciences and develop the relations in between.
6. Intensively aware the current problems of viral origin facing poultry industry and recent theories illustrating poultry and rabbit diseases diagnosis, prevention and control.
7. Master wide range of professional skills and techniques in diagnosis of viral diseases of poultry.
8. Develop the communication and IT skills effectively and leading the team works.
9. Properly employ the available resources and develop them and search for new ones.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Show awareness of his/her role in community development and environmental conservation in the area of poultry diseases in the light of global and regional variables.
12. Commit the moral and legal rules of poultry specialist.
13. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
14. Plan and steer the progress of research projects.
15. Improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date theories and knowledge related to viral diseases of poultry and related sciences.

a.2. Perceive advanced scientific research principles, regulations, ethics and its different tools.

a.3. Identify the legal and moral rules in different professional practices related to viral diseases of poultry.

a.4. Understand the principles and importance of high quality practices in development of poultry industry.

Course specification of postgraduate

a.5. Be aware of his role in community development and environment protection.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to viral diseases of poultry and interpret it to solve the related problems.
b.2. Solve field problems of viral origin affecting poultry and rabbit husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the area of viral diseases of poultry.
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of viral diseases of poultry.
b.6. Properly plan for performance enhancement in diagnosis, prevention and control of viral diseases of poultry.
b.7. Take decisions using the available information in different practices related to viral diseases of poultry.
b.8. Accept Innovation and creativity.
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of viral diseases of poultry.
c.2. Write and evaluate reports related to diagnosis of field cases of viral origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of viral diseases of poultry.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning

d- General and transferable skills:

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

d.1. Communicate effectively using different means.
d.2. Properly use the information technologies for development of his/her professional abilities.
d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.4. Assess him/herself and learn how to detect his/her learning requirements.
d.5. Create rules and indicators for evaluation of the performance of others.
d.6. Use different facilities for gaining knowledge and information.
d.7. Learn how to work effectively as part of a team and properly manage the time.

Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Septicemic diseases of viral origin	1-2	8	4	4
	Viral causes of avian respiratory diseases	3-5	12	6	6
	Viral diseases affecting digestive system of poultry	6-7	8	4	4
	Viral diseases affecting egg production	8-9	8	4	4
	Viral diseases affecting nervous system	10-11	8	4	4
	Lympohproliferaive and immunosuppressive diseases of poultry	12-13	8	4	4
	Egg-born viral diseases of poultry	14	4	2	2
	Viral diseases affecting haemobiotic system	15	4	2	2
	Viral diseases affecting locomotor system	16	4	2	2
	Viral Diseases of waterfowls	17-18	8	4	4
	Viral diseases of turkey	19-20	8	4	4
	Viral diseases of pigeons	21	4	2	2
	Viral diseases of quails	22	4	2	2
	Immunity against viral diseases	23-24	8	4	4
	Advanced laboratory techniques (real-time PCR, Gene sequencing)	25-27	12	6	6
	Principles of biohazards and safety by work in labs (+ essay)	28	4	2	2
	Bases of biosafety when handling biological material	29-30	8	4	4
	Estimation of virus pathogenicity and virus titration	31-33	12	6	6
	Vaccination and the use of genetic engineering for vaccine development	34-36	12	6	6
	Total		144	72	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:
Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

Course specification of postgraduate

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8		d1-d2-d3-d4-d5-d6-d7

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin

Course specification of postgraduate

- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	**Prof. Azza A. Sawah**

Beni Suef University
Faculty of Veterinary Medicine

Course specification Matrix

	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	1	Septicemic diseases of viral origin	1-2	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7
	2	Viral causes of avian respiratory diseases	3-5	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Viral diseases affecting digestive system of poultry	6-7	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Viral diseases affecting egg production	8-9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Viral diseases affecting nervous system	10-11	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Lympohproliferaive and immunosuppressive diseases of poultry	12-13	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Egg-born viral diseases of poultry	14	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Viral diseases affecting haemobiotic system	15	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Viral diseases affecting locomotor system	16	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Viral Diseases of waterfowls	17-18	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	11	Viral diseases of turkey	19-20	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	12	Viral diseases of pigeons	21	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	13	Viral diseases of quails	22	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	14	Immunity against viral diseases	23-24	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	15	Advanced laboratory techniques (real-time PCR, Gene sequencing)	25-27	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	16	Principles of biohazards and safety by work in labs (+ essay)	28	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	17	Bases of biosafety when handling biological material	29-30	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	18	Estimation of virus pathogenicity and virus titration	31-33	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	19	Vaccination and the use of genetic engineering for vaccine development	34-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	1, 2, 3, 4	1,2,3	3, 4	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-172
Course title :	Mycotic Diseases of Poultry
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Master the principles of scientific research. .
2. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry and other related sciences.
3. Integrate the acquired knowledge about fungal diseases and mycotoxicosis of poultry with the other related sciences and develop the relations in between.
4. Intensively aware the current problems facing poultry industry and recent theories illustrating diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry.
5. Identify the practical problems facing poultry industry and their solutions.
6. Master wide range of professional skills and techniques diagnosis of fungal diseases and mycotoxicosis of poultry.
7. Develop new techniques and tools to be applied in diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry.
8. Properly use the suitable technologies to serve of his/her professional practices.
9. Effectively communicate and lead team works.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Properly employ the available resources and develop them and search for new ones.
12. Show awareness of his/her role in community development and environmental conservation in the area of fungal diseases and mycotoxicosis of poultry in the light of global and regional variables.
13. Commit the moral and legal rules of poultry specialist.
14. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
15. Plan and steer the progress of research projects and improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of fungal diseases and mycotoxicosis of poultry and related sciences.

a.2. Perceive advanced scientific research principles, regulations, ethics and its different tools in the field of mycotic diseases of poultry.

a.3. Identify the legal and moral rules in different practices applied in diagnostic, preventive and control of fungal diseases and mycotoxicosis of poultry.

a.4. Understand the principles and importance of high quality practices in development of poultry

industry.

a.5. Be aware of his role in community development and environment protection.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to fungal diseases and mycotoxicosis of poultry and interpret it to solve the related problems.

b.2. Solve field problems of fungal diseases and mycotoxicosis origin affecting poultry and rabbit husbandry and economics using the available data.

b.3. Conduct research studies that add new knowledge to the area of fungal diseases and mycotoxicosis of poultry.

b.4. Write and evaluate scientific papers.

b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry.

b.6. Properly plan for performance enhancement in diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry.

b.7. Take decisions using the available information in different practices related to fungal diseases and mycotoxicosis of poultry.

b.8. Accept Innovation and creativity

b.9. Discuss and debate others using different facts and data

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of fungal diseases and mycotoxicosis of poultry.

c.2. Write and evaluate reports related to diagnosis of field cases of fungal diseases and mycotoxin origin.

c.3. Assess different available tools and methods regarding diagnosis, prevention and control of fungal diseases and mycotoxicosis of poultry.

c.4. Properly use the suitable technologies to serve of his/her professional practices.

c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

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

d.1. Communicate effectively using different means.

d.2. Properly use the information technologies for development of his/her professional abilities.

d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.

d.4. Assess him/herself and learn how to detect his/her learning requirements.

d.5. Create rules and indicators for evaluation of the performance of others.

d.6. Use different facilities for gaining knowledge and information.

d.7. Learn how to work effectively as part of a team and properly manage the time.

Beni-Suef University
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Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Fungal diseases of brooding period and role of hatchery hygiene	1-3	12	6	6
	Fungal diseases affecting nervous system	4-5	8	4	4
	Fungal diseases affecting eye	6-7	8	4	4
	Differential diagnosis of mycotic disease	8-10	12	6	6
	Antifungal immunology	11-14	16	8	8
	Serological tools (ELIZA, HPLC)	15-18	16	8	8
	Molecular diagnosis of mycotic diseases	19-22	16	8	8
	Classification of mycotoxins (origin,, chemical structure, tropism, clinical outcome)	23-24	8	4	4
	Field and laboratory diagnosis of mycotoxicosis	25-27	12	6	6
	Principles of disease prevention and control	28-30	12	6	6
	Treatment of mycotic disease	31-33	12	6	6
	Prevention of mycotoxicosis	34-36	12	6	6
	Total		144	72	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:

Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	

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Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		d1-d-d3d4-d5-d6-d7

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com

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- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	**Prof. Azza A. Sawah**

Beni Suef University
Faculty of Veterinary Medicine

Course specification Matrix

Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
	1	Fungal diseases of brooding period and role of hatchery hygiene	1-3	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7
	2	Fungal diseases affecting nervous system	4-5	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Fungal diseases affecting eye	6-7	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Differential diagnosis of mycotic disease	8-10	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Antifungal immunology	11-14	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Serological tools (ELIZA, HPLC)	15-18	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Molecular diagnosis of mycotic diseases	19-22	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Classification of mycotoxins (origin,, chemical structure, tropism, clinical outcome)	23-24	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Field and laboratory diagnosis of mycotoxicosis	25-27	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Principles of disease prevention and control	28-30	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	11	Treatment of mycotic disease	31-33	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	12	Prevention of mycotoxicosis	34-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	1, 2, 3, 4	1,2,3	3, 4	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-173
Course title :	Parasitic Diseases of Poultry
Program title:	PhD
Contact hours/ week	3 hours per week (1 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of parasitic diseases of poultry.
1. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of parasitic diseases of poultry and other related sciences.
2. Integrate the acquired knowledge about parasitic diseases of poultry with the other related sciences and develop the relations in between.
3. Intensively aware the current problems facing poultry industry and recent theories illustrating diagnosis, prevention and control of parasitic diseases of poultry.
4. Identify the parasitic diseases facing poultry industry and their solutions.
5. Master wide range of professional skills and techniques diagnosis of parasitic diseases of poultry.
6. Develop new techniques and tools to be applied in diagnosis, prevention and control of parasitic diseases of poultry.
7. Properly use the suitable technologies to serve of his/her professional practices.
8. Effectively communicate and lead team works.
9. Make decisions depending on the available data in different professional and practical contexts.
10. Properly employ the available resources and develop them and search for new ones.
11. Show awareness of his/her role in community development and environmental conservation in the area of parasitic diseases of poultry in the light of global and regional variables.
12. Commit the moral and legal rules of poultry specialist.
13. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
14. Plan and steer the progress of research projects.
15. Improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of parasitic diseases of poultry and related sciences.

a.2. Perceive advanced scientific research principles and morals of scientific research in the field of parasitic diseases of poultry.

a.3. Identify the legal and moral rules in different practices applied in diagnostic, preventive and control of parasitic diseases of poultry.

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a.4. Understand the principles and importance of high quality practices in development of poultry industry.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to parasitic diseases of poultry and interpret it to solve field problems.

b.2. Solve field problems of parasitic origin affecting poultry and rabbit husbandry and economics using the available data.

b.3. Conduct research studies that add new knowledge to the area of parasitic diseases of poultry and rabbit.

b.4. Write and evaluate scientific papers.

b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of parasitic diseases of poultry.

b.6. Properly plan for performance enhancement in diagnosis, prevention and control of parasitic diseases of poultry.

b.7. Take decisions using the available information in different practices related to parasitic diseases of poultry.

b.8. Accept and improve innovation and creativity.

b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of parasitic diseases of poultry.

c.2. Write and evaluate reports related to diagnosis of field cases of parasitic origin.

c.3. Assess different available tools and methods regarding diagnosis, prevention and control of parasitic diseases of poultry.

c.4. Properly use the suitable technologies to serve of his/her professional practices.

c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

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

d.1. Communicate effectively using different means and properly use the information technologies for development of his/her professional abilities.

d.2. Educate the others and evaluate their performance.

d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.

d.4. Utilize the resources to obtain knowledge and information.

d.5. Create rules and indicators for evaluation of the performance of others.

d.6. Use different facilities for gaining knowledge and information.

d.7. Learn how to work effectively as part of a team and properly manage the time.

d.8. Manage scientific meetings and conferences.

Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 1h./week, Pract 2h./week)	External parasites of different species of poultry and rabbit and their differential diagnosis	1-5	15	5	10
	Nematodes and cestodes of different species of poultry and rabbit and their economic and zoonotic potentials	6-10	15	5	10
	Coccidiosis of poultry and rabbit with special regard to immunology and vaccination	11-15	15	5	10
	Other protozoan infestation in chicken and turkey	16-18	9	3	6
	Parasitic immunology, advanced	19-21	9	3	6
	Molecular methods for diagnosis of parasitic diseases	22-24	9	3	6
	Sanitary environment in the face of parasitic diseases	25-27	9	3	6
	Anticoccidial drug resistance, how to detect and prevent.	28-30	9	3	6
	Anthelmentics, insecticides and antiprotoza drugs	31-33	9	3	6
	Toward safe use of insecticides and other alternatives	34-36	9	3	6
	Total		108	36	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

Course specification of postgraduate

5.4. Training visits:
Visits to poultry farms and poultry feed processing plants.
5.5. Assays and reviews
5.6. Discussion groups

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1-a2-a3-a4	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4	b1-b2-b3-b4-b5-b6-b7-b8-b9		d1-d2-d3-d4-d5-d6-d7-d8

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Course specification of postgraduate

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	Prof. Azza A. Sawah

Course specification Matrix

	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 3hours / weak (Lec. 1hr/wk - Pract. 2hr/wk)	1	External parasites of different species of poultry and rabbit and their differential diagnosis	1-5	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8
	2	Nematodes and cestodes of different species of poultry and rabbit and their economic and zoonotic potentials	6-10	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Coccidiosis of poultry and rabbit with special regard to immunology and vaccination	11-15	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Other protozoan infestation in chicken and turkey	16-18	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Parasitic immunology, advanced	19-21	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Molecular methods for diagnosis of parasitic diseases	22-24	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Sanitary environment in the face of parasitic diseases	25-27	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Anticoccidial drug resistance, how to detect and prevent.	28-30	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Anthelmentics, insecticides and antiprotoza drugs	31-33	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Toward safe use of insecticides and other alternatives	34-36	1, 2, 3, 4	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	1, 2, 3, 4	1,2,3	3, 4	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-174
Course title :	Nutritional Diseases of Poultry
Program title:	PhD
Contact hours/ week	3 hours per week (1 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Work continuously to develop his/her knowledge in the field of nutritional diseases of poultry.
2. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of nutritional diseases of poultry and other related sciences.
3. Integrate the acquired knowledge about nutritional diseases of poultry with the other related sciences and develop the relations in between.
4. Intensively aware the current problems facing poultry industry and recent theories illustrating diagnosis, prevention and control of nutritional diseases of poultry.
5. Identify the practical problems facing poultry industry and their solutions.
6. Master wide range of professional skills and techniques diagnosis of nutritional diseases of poultry.
7. Develop new techniques and tools to be applied in diagnosis, prevention and control of nutritional diseases of poultry.
8. Properly use the suitable technologies to serve of his/her professional practices.
9. Effectively communicate and lead team works.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Properly employ the available resources and develop them and search for new ones.
12. Show awareness of his/her role in community development and environmental conservation in the area of nutritional diseases of poultry in the light of global and regional variables.
13. Commit the moral and legal rules of poultry specialist.
14. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date theories and knowledge in the field of nutritional diseases of poultry and related sciences.

a.2. Perceive advanced scientific research principles and morals of scientific research in the field of nutritional diseases of poultry.

a.3. Identify the legal and moral rules in different practices applied in diagnostic, preventive and control of nutritional diseases of poultry.

a.4. Recognize the mutual influence between different professional practices and their impacts on the environment.

a.5. Be aware of his role in community development and environment protection.

Course specification of postgraduate

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to nutritional diseases of poultry and interpret it to solve the related problems.
b.2. Solve field problems of nutritional origin affecting poultry and rabbit husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the area of nutritional diseases of poultry.
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of nutritional diseases of poultry.
b.6. Properly plan for performance enhancement in diagnosis, prevention and control of nutritional diseases of poultry.
b.7. Take decisions using the available information in different practices related to nutritional diseases of poultry.
b.8. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of nutritional diseases of poultry.
c.2. Write and evaluate reports related to diagnosis of field cases of nutritional origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of nutritional diseases of poultry.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning.

d- General and transferable skills

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

d.1. Communicate effectively using different means.
d.2. Properly use the information technologies for development of his/her professional abilities.
d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.4. Assess him/herself and learn how to detect his/her learning requirements.
d.5. Create rules and indicators for evaluation of the performance of others.
d.6. Use different facilities for gaining knowledge and information.
d.7. Learn how to work effectively as part of a team and properly manage the time.
d.8. Effectively lead teamwork.
d.9. Manage scientific meetings and conferences.

Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 1h./week, Pract 2h./week)	Effect of protein deficiency on broilers and layers	1-3	9	3	6
	Plant versus animal proteins in poultry feeds	4-5	6	2	4
	Gout… causes, pathogenesis and correction plans	6-7	6	2	4
	Carbohydrates deficiency and problems caused by excess energy level in poultry feed(heat gain and heat loss –body performance)	8-10	9	3	6
	Fat deficiency and problems caused by excess fat level in poultry feed(fatty liver syndrome-metabolic disorders)	11-13	9	3	6
	Fat soluble vitamins deficiency versus hyper-vitaminosis	14-16	9	3	6
	Water soluble vitamins deficiency versus hyper-vitaminosis	17-19	9	3	6
	Minerals deficiency, mineral intoxication and imbalance	20-21	6	2	4
	How to improve feed quality, digestibility and absorption rates (essay)	22-23	6	2	4
	poultry nutritional disorders and function of the immune system	24-26	9	3	6
	Histopathology for diagnosis of nutritional disorders	27-28	6	2	4
	Poultry feed stuffs and other alternatives	29-31	9	3	6
	Bases of poultry feed formulation, advanced	32-33	6	2	4
	Role of growth promoters and other additives in correction of nutritional deficiency, advanced	34-36	9	3	6
	Total		108	36	72

Course specification of postgraduate

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:
Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	**I.S**	**P&P.S**	**G.S**
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8		d1-d2-d3-d4-d5-d6-d7-d8-d9

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

Course specification of postgraduate

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
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- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	Prof. Azza A. Sawah

Course specification Matrix

	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 3hours / weak (Lec. 1hr/wk - Pract. 2hr/wk)	1	Effect of protein deficiency on broilers and layers	1-3	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9
	2	Plant versus animal proteins in poultry feeds	4-5	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	3	Gout… causes, pathogenesis and correction plans	6-7	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	4	Carbohydrates deficiency and problems caused by excess energy level in poultry feed(heat gain and heat loss –body performance)	8-10	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	5	Fat deficiency and problems caused by excess fat level in poultry feed(fatty liver syndrome-metabolic disorders)	11-13	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	6	Fat soluble vitamins deficiency versus hyper-vitaminosis	14-16	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	7	Water soluble vitamins deficiency versus hyper-vitaminosis	17-19	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	8	Minerals deficiency, mineral intoxication and imbalance	20-21	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	9	How to improve feed quality, digestibility and absorption rates (essay)	22-23	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	10	poultry nutritional disorders and function of the immune system	24-26	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	11	Histopathology for diagnosis of nutritional disorders	27-28	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	12	Poultry feed stuffs and other alternatives	29-31	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	13	Bases of poultry feed formulation, advanced	32-33	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	14	Role of growth promoters and other additives in correction of nutritional deficiency, advanced	34-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5	
	Student activity		Along the course	3	1, 2, 3, 4	1,2,3	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-175
Course title :	Diseases of Wild and Migratory Birds
Program title:	PhD
Contact hours/ week	3 hours per week (1 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of nutritional diseases of poultry.
3. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of wild and migratory birds diseases and other related sciences.
4. Integrate the acquired knowledge about wild and migratory birds diseases with the other related sciences and develop the relations in between.
5. Intensively aware the current problems facing these birds and recent theories illustrating diagnosis, prevention and control of wild and migratory birds diseases.
6. Identify the practical problems facing poultry industry and their solutions.
7. Master wide range of professional skills and techniques diagnosis of wild and migratory birds diseases
8. Develop new techniques and tools to be applied in diagnosis, prevention and control of wild and migratory birds diseases Properly use the suitable technologies to serve of his/her professional practices.
9. Effectively communicate and lead team works.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Properly employ the available resources and develop them and search for new ones.
12. Show awareness of his/her role in community development and environmental conservation in the area of wild and migratory birds diseases in the light of global and regional variables.
13. Commit the moral and legal rules of poultry specialist.
14. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
15. Improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of wild and migratory birds diseases and related sciences.

a.2. Perceive advanced scientific research principles and morals of scientific research in the field of wild and migratory birds diseases.

a.3. Identify the legal and moral rules in different practices applied in diagnostic, preventive and control of wild and migratory birds diseases.

Course specification of postgraduate

a.4. Understand the principles and importance of high quality practices in development of poultry industry.
a.5. Be aware of his role in community development and environment protection.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to wild and migratory birds diseases and interpret it to solve the related problems.
b.2. Solve field problems of bacterial, viral, mycotic and parasitic origin affecting wild and migratory birds using the available data.
b.3. Conduct research studies that add new knowledge to the area of wild and migratory birds diseases.
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of wild and migratory birds diseases.
b.6. Properly plan for performance enhancement in diagnosis, prevention and control of wild and migratory birds diseases.
b.7. Take decisions using the available information in different practices related to wild and migratory birds diseases.
b.8. Accept and improve innovation and creativity.
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of wild and migratory birds diseases.
c.2. Write and evaluate reports related to diagnosis of field cases of viral, bacterial, parasitic and fungal origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of wild and migratory birds diseases.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

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

d.1. Communicate effectively using different means.
d.2. Properly use the information technologies for development of his/her professional abilities.
d.3. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.4. Assess him/herself and learn how to detect his/her learning requirements.
d.5. Create rules and indicators for evaluation of the performance of others.
d.6. Use different facilities for gaining knowledge and information.
d.7. Learn how to work effectively as part of a team and properly manage the time.
d.8. Effectively lead teamwork.
d.9. Manage scientific meetings and conferences.

Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 1h./week, Pract 2h./week)	Migratory birds as reservoir, dead end or natural host of infectious diseases	1-4	12	4	8
	Trans-boundary avian diseases	5-8	12	4	8
	Viral diseases wild and migratory birds and their zoonotic potential	9-12	12	4	8
	Bacterial diseases wild and migratory birds, advanced	13-16	12	4	8
	Mycotic diseases wild and migratory birds, advanced	17-18	6	2	4
	Parasitic diseases wild and migratory birds, advanced	19-21	9	3	6
	Field diagnosis and epidemiological investigation	22-25	12	4	8
	Conventional and advanced laboratory techniques	26-29	12	4	8
	Toward decisive surveillance of diseases among wild and migratory birds	30-32	9	3	6
	Advancement in prevention and control of avian diseases	33-36	12	4	8
	Total		108	36	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:

Visits to rabbit farms and feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

Course specification of postgraduate

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	**I.S**	**P&P.S**	**G.S**
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		d1-d2-d3-d4-d5-d6-d7-d8-d9

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

Course specification of postgraduate

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

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- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	Prof. Azza A. Sawah

Beni Suef University
Faculty of Veterinary Medicine

Course specification Matrix

Postgraduate students Poultry and rabbit diseases 3hours / weak (Lec. 1hr/wk - Pract. 2hr/wk)	Topics		week	Intended learning outcomes of course (ILOs)			
				K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
	1	Migratory birds as reservoir, dead end or natural host of infectious diseases	1-4	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9
	2	Trans-boundary avian diseases	5-8	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Viral diseases wild and migratory birds and their zoonotic potential	9-12	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Bacterial diseases wild and migratory birds, advanced	13-16	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Mycotic diseases wild and migratory birds, advanced	17-18	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Parasitic diseases wild and migratory birds, advanced	19-21	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Field diagnosis and epidemiological investigation	22-25	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Conventional and advanced laboratory techniques	26-29	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Toward decisive surveillance of diseases among wild and migratory birds	30-32	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Advancement in prevention and control of avian diseases	33-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	3, 5	3, 4, 9	2, 3, 4, 5	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-176
Course title :	Rabbit Diseases (Advanced Course)
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of bacterial, viral, parasitic, nutritional, Miscellaneous, mycotic diseases of rabbit.
3. Apply the analytical and evaluating approaches to knowledge in diagnosis, prevention and control of bacterial, viral, parasitic, nutritional, Miscellaneous, mycotic diseases of rabbit and other related sciences.
4. Integrate the acquired knowledge about different rabbit diseases. With the other related sciences and develop the relations in between.
5. Intensively aware the current problems facing poultry industry and recent theories illustrating diagnosis, prevention and control of different rabbit diseases.
6. Identify the practical problems facing poultry industry and their solutions.
7. Master wide range of professional skills and techniques diagnosis of different rabbit diseases.
8. Develop new techniques and tools to be applied in diagnosis, prevention and control of different rabbit diseases. Properly use the suitable technologies to serve of his/her professional practices.
9. Effectively communicate and lead team works.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Properly employ the available resources and develop them and search for new ones.
12. Show awareness of his/her role in community development and environmental conservation in the area of different rabbit diseases.in the light of global and regional variables.
13. Commit the moral and legal rules of poultry specialist.
14. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of different rabbit diseases and related sciences.

a.2. Perceive advanced scientific research principles and morals of scientific research in the field different rabbit diseases.

a.3. Identify the legal and moral rules in different practices applied in diagnostic, preventive and control of different rabbit diseases.

a.4. Understand the principles and importance of high quality practices in development of poultry industry.

Course specification of postgraduate

a.5. Be aware of his role in community development and environment protection.

b- Intellectual skills:

b-Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to different rabbit diseases and interpret it to solve the related problems.
b.2. Solve field problems of different rabbit diseases, husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the area of bacterial, viral, parasitic, nutritional and mycotic diseases of rabbit.
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to diagnosis, prevention and control of different rabbit diseases.
b.6. Properly plan for performance enhancement in diagnosis, prevention and control of different rabbit diseases.
b.7. Take decisions using the available information in different practices related to different rabbit diseases.
b.8. Discuss and debate others using different facts and data
b.9. Accept and improve innovation and creativity.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of bacterial, viral, parasitic, nutritional and mycotic diseases of rabbit.
c.2. Write and evaluate reports related to diagnosis of field cases of bacterial, viral, parasitic, nutritional and mycotic origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of different rabbit diseases.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning

d- General and transferable skills:

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

d.1. Communicate effectively using different means.
d.2. Properly use the information technologies for development of his/her professional abilities.
d.1. Perform self-development and continuous learning and educate the others and evaluate their performance.
d.3. Assess him/herself and learn how to detect his/her learning requirements.
d.4. Create rules and indicators for evaluation of the performance of others.
d.5. Use different facilities for gaining knowledge and information.
d.6. Learn how to work effectively as part of a team and properly manage the time.
d.7. Effectively lead teamwork.
d.8. Manage scientific meetings and conferences

Course specification of postgraduate

4-Topics and contents

Course	Topics	Week	Total (hr)	Lectures (hr)	Practical (hr)
Poultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	**Septicemia in rabbits**	1-4	16	8	8
	Respiratory diseases	5-8	16	8	8
	Enteropathy in suckling and weanling rabbits	9-12	16	8	8
	Causes of abortion in rabbits	13-14	8	4	4
	Skin diseases in rabbits and their prevention	15-17	12	6	6
	Rabbit diseases causing nervous manifestations	18-19	8	4	4
	Vices and miscellaneous diseases in rabbit	20-22	12	6	6
	Toward rapid and accurate diagnosis of rabbit diseases	23-25	12	6	6
	Zoonotic potential of wild and domestic rabbits	26-27	8	4	4
	Advanced laboratory tools	28-30	12	6	6
	Biosecurity and medication against rabbit diseases, advanced	31-33	12	6	6
	Role of vaccination in prevention of rabbit diseases	34-36	12	6	6
	Total		**144**	**72**	**72**

5-Teaching and learning methods

5.1 Lectures: Depends on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2 Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3 Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library.

5.4 Assays and reviews

5.5 Discussion groups

Course specification of postgraduate

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	**I.S**	**P&P.S**	**G.S**
Written Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5	b1-b2-b3-b4-b5-b6-b7-b8-b9		D1-d-d3d4-d5-d6-d7-d8

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

Course specification of postgraduate

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	Prof. Azza A. Sawah

Course specification Matrix

	Topics		Week	Intended learning outcomes of course (ILOs)			
				K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	1	Septicemia in rabbits	1-4	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8
	2	Respiratory diseases	5-8	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Enteropathy in suckling and weanling rabbits	9-12	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Causes of abortion in rabbits	13-14	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Skin diseases in rabbits and their prevention	15-17	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Rabbit diseases causing nervous manifestations	18-19	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Vices and miscellaneous diseases in rabbit	20-22	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Toward rapid and accurate diagnosis of rabbit diseases	23-25	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Zoonotic potential of wild and domestic rabbits	26-27	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Advanced laboratory tools	28-30	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	11	Biosecurity and medication against rabbit diseases, advanced	31-33	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	12	Role of vaccination in prevention of rabbit diseases	34-36	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	3, 4, 5	3, 4, 8, 9	2, 3, 4, 5	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-177
Course title :	Prevention in the Field of Poultry Diseases
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student able to:

1. Work continuously to develop his/her knowledge in the field of poultry diseases prevention.
2. Master the principles of scientific research.
3. Apply the analytical and evaluating approaches to knowledge poultry diseases prevention and other related sciences.
4. Integrate the acquired knowledge about poultry diseases prevention with the other related sciences and develop the relations in between.
5. Intensively aware the current problems facing poultry industry and recent theories illustrating poultry diseases prevention.
6. Identify the practical problems facing poultry industry and their solutions.
7. Master wide range of professional skills and techniques poultry diseases prevention.
8. Develop new techniques and tools to be applied in poultry diseases prevention
9. Properly use the suitable technologies to serve of his/her professional practices.
10. Develop the communication and IT skills effectively and leading the team works.
11. Make decisions depending on the available data in different professional and practical contexts.
12. Properly employ the available resources and develop them and search for new ones and plan and steer the progress of research projects.
13. Show awareness of his/her role in community development and environmental conservation in the area of poultry diseases prevention in the light of global and regional variables.
14. Commit the moral and legal rules of poultry specialist.
15. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others and improve the skills of writing scientific reports and papers .

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of poultry diseases prevention.
a.2. Perceive advanced scientific research principles and morals of scientific research in the field of poultry diseases prevention
a.3. Identify the legal and moral rules in different practices applied in poultry diseases prevention.
a.4. Understand the principles and importance of high quality practices in development of poultry industry.
a.5. Recognize the mutual influence between different professional practices and their impacts on the environment.
a.6. Describe and recognize advanced research techniques used in the field of poultry diseases.

a.7. Be aware of his knowledge and understanding of problems related to poultry diseases to the critical analysis and discusses scientific literature.

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to poultry diseases prevention.
b.2. Solve field problems affecting poultry and rabbit husbandry and economics using the available data.
b.3. Conduct research studies that add new knowledge to the area poultry diseases.
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to poultry diseases prevention including vaccination scheme and biosecurity program.
b.6. Properly plan for performance enhancement in poultry diseases prevention.
b.7. Take decisions using the available information in different practices related to poultry diseases prevention.
b.8. Accept Innovation and creativity.
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of poultry diseases prevention.
c.2. Write and evaluate vaccination scheme and biosecurity program related to diagnosis of field cases.
c.3. Assess different available tools and methods regarding poultry diseases prevention.
c.4. Properly use the suitable technologies to serve of his/her professional practices.
c.5. Enhance the performance of others through proper planning.

d- General and transferable skills:

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

d.1. Communicate effectively using different means.
d.2. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.3. Assess him/herself and learn how to detect his/her learning requirements.
d.4. Create rules and indicators for evaluation of the performance of others.
d.5. Use different facilities for gaining knowledge and information.
d.6. Learn how to work effectively as part of a team and properly manage the time and effectively lead teamwork.
d.7. Manage scientific meetings and conferences.

Course specification of postgraduate

4-Topics and contents

Course	Topics	Week	Total (hr)	Lectures (hr)	Practical (hr)
hPoultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Maintenance of avian pathogens in the environment	1-3	12	6	6
	Sources of infection and modes of transmission of poultry diseases	4-7	16	8	8
	The avian immune system and immunosuppressive agents	8-11	16	8	8
	Humoral, cellular and mucosal immunity against different pathogens	12-15	16	8	8
	Biosecurity and its role in breaking the chain of infection	16-18	12	6	6
	Toward safe and effective disinfection of poultry houses and equipment	19-21	12	6	6
	Breeder management and its role in prevention and control of egg-borne diseases	22-25	16	8	8
	Hatchery sanitization	26-28	12	6	6
	Genetic engineering for improvement of poultry vaccines	29-32	16	8	8
	Medication against poultry diseases, advanced	33-36	16	8	8
	Total		144	72	72

5-Teaching and learning methods

5.1. Lectures: Depends on the sharing efforts of the students and supported with macromedia Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:
Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

5.6. Discussion groups

Course specification of postgraduate

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1-a2-a3-a4-a5-a6-a7	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5-a6-a7	b1-b2-b3-b4-b5-b6-b7-b8-b9		D1-d-d3d4-d5-d6-d7

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Course specification of postgraduate

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	**Prof. Azza A. Sawah**

Beni Suef University
Faculty of Veterinary Medicine

Course specification Matrix

Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	Topics		Week	Intended learning outcomes of course (ILOs)			
				K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
	1	Maintenance of avian pathogens in the environment	1-3	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7
	2	Sources of infection and modes of transmission of poultry diseases	4-7	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	The avian immune system and immunosuppressive agents	8-11	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Humoral, cellular and mucosal immunity against different pathogens	12-15	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Biosecurity and its role in breaking the chain of infection	16-18	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Toward safe and effective disinfection of poultry houses and equipment	19-21	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Breeder management and its role in prevention and control of egg-borne diseases	22-25	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Hatchery sanitization	26-28	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Genetic engineering for improvement of poultry vaccines	29-32	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Medication against poultry diseases, advanced	33-36	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	3, 4	3, 4, 8, 9	2, 3, 4, 5	

Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	Ph-178
Course title :	Laboratory Diagnosis of Poultry Diseases
Program title:	PhD
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

This course aims that student is able to:

1. Master the principles of scientific research.
2. Work continuously to develop his/her knowledge in the field of lab diagnosis of poultry diseases.
3. Apply the analytical and evaluating approaches to knowledge in lab diagnosis of poultry diseases and other related sciences.
4. Integrate the acquired knowledge about lab diagnosis of poultry diseases with the other related sciences and develop the relations in between.
5. Intensively aware the current problems facing poultry industry and recent theories illustrating lab diagnosis of poultry diseases.
6. Master wide range of professional skills and techniques lab diagnosis of poultry diseases.
7. Develop new techniques and tools to be applied in lab diagnosis of poultry diseases.
8. Properly use the suitable technologies to serve of his/her professional practices.
9. Effectively communicate and lead team works.
10. Make decisions depending on the available data in different professional and practical contexts.
11. Properly employ the available resources and develop them and search for new ones.
12. Show awareness of his/her role in community development and environmental conservation in the area of lab diagnosis of poultry diseases in the light of global and regional variables.
13. Commit the moral and legal rules of poultry specialist.
14. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
15. Improve the skills of writing scientific reports and papers.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

a.1. Acquire up to date recent theories and knowledge in the field of lab diagnosis of poultry diseases.

a.2. Perceive advanced scientific research principles and morals of scientific research in lab diagnosis of poultry diseases.

a.3. Identify the legal and moral rules in different practices applied in lab diagnosis of poultry diseases and know safety measures applied when handling hazardous substance.

a.4. Understand the principles and importance of high quality practices in development of poultry industry.

a.5. Be aware of his role in community development and environment protection.

a.6. Recognize advanced research techniques used in the field of poultry diseases.

Course specification of postgraduate

b- Intellectual skills:

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

b.1. Analyze and evaluate knowledge related to lab diagnosis of poultry diseases and interpret it to solve the related problems.
b.2. Solve field problems of lab diagnosis of poultry diseases using the available data.
b.3. Conduct research studies that add new knowledge to the area of lab diagnosis of poultry diseases
b.4. Write and evaluate scientific papers.
b.5. Asses different risk factors for each practice related to lab diagnosis of poultry diseases.
b.6. Properly plan for performance enhancement in lab diagnosis of poultry diseases.
b.7. Take decisions using the available information in different practices related to lab diagnosis of poultry diseases.
b.8. Accept Innovation and creativity
b.9. Discuss and debate others using different facts and data.

c- Professional and practical skills:

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

c.1. Perfectly perform different conventional and advanced techniques in the field of viral diseases of poultry.
c.2. Write and evaluate reports related to diagnosis of field cases of viral origin.
c.3. Assess different available tools and methods regarding diagnosis, prevention and control of viral diseases of poultry.
c.4. Properly use the suitable technologies to serve of his/her professional practices and perfectly handle and manage experimental hosts and apply an experimental work.
c.5. Enhance the performance of others through proper planning and proper sampling, sample transport, processing and preservation.

d- General and transferable skills:

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

d.1. Communicate effectively using different means and properly use the information technologies for development of his/her professional abilities.
d.2. Perform self-development and continuous learning and transfer the acquired knowledge and experience to others.
d.3. Assess him/herself and learn how to detect his/her learning requirements.
d.4. Educate the others and evaluate their performance.
d.5. Utilize the resources to obtain knowledge and information.
d.6. Learn how to work effectively as part of a team and properly manage the time and effectively lead teamwork.
d.7. Manage scientific meetings and conferences.

Course specification of postgraduate

4-Topics and contents

Course	Topics	Week	Total (hr)	Lectures (hr)	Practical (hr)
hPoultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Advanced laboratory diagnostic scheme	1-2	8	4	4
	Biosafety by work in lab., and its requirements	3-4	8	4	4
	Sterilization and environment protection	5-6	8	4	4
	Advances in sampling and samples preservation	7-8	8	4	4
	Purification, titration and long term storage avian pathogens	9-11	12	6	6
	Lab diagnosis of avian respiratory affections	12-13	8	4	4
	Lab diagnosis of septicemic diseases of poultry	14-15	8	4	4
	Lab differentiation of Lympohproliferaive diseases of poultry	16-17	8	4	4
	Lab investigation of problems affecting egg production	18-19	8	4	4
	Lab investigation of problems affecting feed conversion	20-21	8	4	4
	Lab diagnosis of diseases affecting nervous system of poultry	22-23	8	4	4
	Detection of carrier birds by serological and molecular methods	24-25	8	4	4
	Lab diagnosis of diseases of waterfowls	26-27	8	4	4
	Lab diagnosis of diseases of turkey	28-29	8	4	4
	Lab diagnosis of diseases of pigeons	30-31	8	4	4
	Lab diagnosis of diseases of quails	32-33	8	4	4
	Toward rapid and accurate diagnosis of multi-causal avian diseases	34-36	12	6	6
	Total		144	72	72

5-Teaching and learning methods

5.1. Lectures: Depend on the sharing efforts of the students and supported with macromedia and multimedia aids.

5.2. Practical sections:

- Clinical and necropsy examination of diseased and dead samples.
- Laboratory diagnosis of different poultry and rabbit diseases using suitable methods.
- Antimicrobial sensitivity testing.

5.3. Self-learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, and related books in faculty library.

5.4. Training visits:

Visits to poultry farms and poultry feed processing plants.

5.5. Assays and reviews

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5.6. Discussion groups

6-Student assessment

6.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	**I.S**	**P&P.S**	**G.S**
Written Exam	a1-a2-a3-a4-a5-a6	b1-b2-b3-b4-b5-b6-b7-b8-b9		
Practical Exam		b1-b2-b3-b4-b5-b6-b7-b8-b9	c1-c2-c3-c4-c5	
Oral Exam	a1-a2-a3-a4-a5-a6	b1-b2-b3-b4-b5-b6-b7-b8-b9		d1-d2-d3-d4-d5-d6-d7

6.2. Assessment schedules

Method	Week(s)
Written exam	53-55 Managed by Faculty administration
Practical exam	52 Managed by Department administration
Oral exam	53-55 Managed by Department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Written exam	**50%**
Practical exam	**25%**
Oral exam	**25%**
Total	100%

7- List of references

7.1. Notes and books

None

7.2. Essential books:

- Diseases of Poultry, 13th ed. Iowa State Univ. Wiley Blackwell. By David E. Swayne, John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, and Venugopal Nair

7.3. Recommended texts

- Laboratory Manual for the Isolation and Identification of Avian Pathogens: BY David E. Swayne, John R. Glisson and Mark W. Jackwood

Journals:

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- Avian diseases
- Avian pathology
- British poultry science
- Veterinary Bulletin
- Veterinary Microbiology

Websites:

- www.poultryhelp.com
- www.thepoultrysite.com
- www.canadianpoultry.com
- www.aaap.net
- www.poultrydiseases.net
- www.poultryconnection.com
- www.worldpoultry.com
- www.sciencedirect.com

Course Coordinator	Head of Department
Dr. Salama Abohamra	**Prof. Azza A. Sawah**

Course specification Matrix

	Topics		Week	Intended learning outcomes of course (ILOs)			
				K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Postgraduate students Poultry and rabbit diseases 4 hours / weak (Lec. 2hr/wk - Pract. 2hr/wk)	1	Advanced laboratory diagnostic scheme	1-2	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7
	2	Biosafety by work in lab., and its requirements	3-4	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	3	Sterilization and environment protection	5-6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	4	Advances in sampling and samples preservation	7-8	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	5	Purification, titration and long term storage avian pathogens	9-11	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	6	Lab diagnosis of avian respiratory affections	12-13	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	7	Lab diagnosis of septicemic diseases of poultry	14-15	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	8	Lab differentiation of Lympohproliferaive diseases of poultry	16-17	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	9	Lab investigation of problems affecting egg production	18-19	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	10	Lab investigation of problems affecting feed conversion	20-21	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	11	Lab diagnosis of diseases affecting nervous system of poultry	22-23	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	12	Detection of carrier birds by serological and molecular methods	24-25	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	13	Lab diagnosis of diseases of waterfowls	26-27	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	14	Lab diagnosis of diseases of turkey	28-29	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	15	Lab diagnosis of diseases of pigeons	30-31	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	16	Lab diagnosis of diseases of quails	32-33	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	17	Toward rapid and accurate diagnosis of multi-causal avian diseases	34-36	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5	
	Student activity		Along the course	3, 4, 5	3, 4, 6, 7, 8, 9	2, 3, 4, 5	