



Beni-Suef University
Faculty of Veterinary Medicine

Programme Specification

A- Administrative Information	
1- Programme title:	Diploma of Vet. Med. Sciences (Poultry and Rabbit)
2- Award/degree:	Diploma
3- Code:	D5
4- Department responsible:	Department of Poultry Diseases
5- Coordinator:	Dr. SalamaAbohamraSayedShany
6- External evaluator(s)	Prof. Dr. Youssef Ibrahim Youssef
7- Approval date:	02-10-2018

B- Professional Information
1- Programme aims: The Diploma programme support the postgraduate student ability to:

1. Apply acquired scientific knowledge in the field of poultry and rabbit diseases
2. Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.
3. Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.
4. Be qualified for the requirements of the veterinary and public health labor market, and aware of his/her role in community
5. Be qualified for admission to further postgraduate programmed (MVSc) in poultry and rabbit diseases
6. Effectively use the available facilities and resources and his develop information technology skills.

2- Intended learning outcomes (ILOs) for programme

a- **Knowledge and understanding:** By the end of the Diploma program, the postgraduate should be able to:

- a.1. Knowing and well informed about poultry and rabbit diseases and related sciences.
- a.2. Identify the legal and moral rules in practices targeting diagnosis of poultry and rabbit diseases, poultry and rabbit pathology and microbiology, poultry and rabbit feeding and management and recognize veterinary professional practice regulations and ethics.
- a.3. Specify the different quality management systems in poultry raising.

b- Intellectual skills: By the end of the Diploma program, the postgraduate should be able to:

- b.1. Detect and analyze problems facing poultry and rabbit and arrange them according to their priorities.
- b.2. Suggest the appropriate solutions for problems related to poultry and rabbit industry.
- b.3. Make scientific reading and analysis of research papers and topics related to poultry diseases, parasites, avian disease pathology, different avian pathogens, epidemiology of poultry diseases and bases of poultry feed formulation.
- b.4. Assess the different risk factors for each practice related to diagnosis of poultry and rabbit diseases, poultry and rabbit feeding and management to be able to make differential diagnosis.
- b.5. Take decisions using the available information.

c- Professional and practical skills: By the end of the Diploma program, the postgraduate should be able to:

- c.1. Apply different professional skills and techniques in diagnosis of poultry and rabbit diseases.
- c.2. Prepare a sheet for poultry farm history and write a diagnostic report for field cases.

d- General and transferable skills: By the end of the Diploma program, the postgraduate must 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. Assess him/herself and learn how to detect his/her learning requirements.
- d.4. Use different facilities for gaining knowledge and information.
- d.5. Learn how to work effectively as part of a team and properly manage the time.
- d.6. Lead teamwork effectively.
- d.7. Understand the significance and means of continuous self-learning.

3- Academic standards

* 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) Diploma 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, BeniSuef University, BeniSuef, Egypt are selected to confirm the appropriateness of the academic standards .

4 – Curriculum structure and content.

4.1. Programme duration: 1 year

4.2. Programme structure:

Title	Lecture	Practical	Total
D5-A Poultry and Rabbit Diseases	2	2	4
D5-B Poultry and Rabbit Parasites	2	2	4
D5-C Poultry and Rabbit Pathology	2	2	4
D5-D Poultry and Rabbit Microbiology	2	2	4
D5-E Poultry and Rabbit Hygiene, Management and Nutrition	2	1	3
Total	10	9	19

5- Programme – course ILOS Matrix

Code	Knowledge and understanding			Intellectual skills					Professional and practical skills		General and transferable skills						
	a1	a2	a3	b1	b2	b3	b4	b5	c1	c2	d1	d2	d3	d4	d5	d6	d7
D5-A	a1	a2	a3	b1	b2	b3	b4	b5	c1	c2	d1	d2	d3	d4	d5	d6	d7
D5-B	a1	a2		b1	b2	b3	b4		c1	c2	d1		d3	d4	d5		d7
D5-C	a1	a2		b1		b3	b4			c2	d1	d2	d3		d5	d6	d7
D5-D	a1	a2			b2		b4	b5	c1	c2	d1	d2	d3	d4		d6	d7
D5-E	a1	a2	a3	b1	b2		b4	b5	c1	c2	d1	d2	d3	d4	d5		d7

6- Programme admission requirement:

- 1- Obtaining a bachelor degree in veterinary medicine sciences from one of the Egyptian universities or equivalent degree from another recognized scientific institute with any grade.
- 2- The bachelor degree must be obtained at least one year prior to registration.
- 3- The applicant must have regular attendance in his courses according to the schedule of the faculty.
- 4- Registration will be during September of each year.

7 - Regulations for progression and programme completion.

- 1- Registration period is one year for diploma and the applicant not exceed a period of registration for two year.
- 2- The examinations of the diploma are 2 times / year in December & April.
- 3- The faculty council has the right to deprive the applicant from the exam if his attendance courses are less than 75%.
- 4- In case of failure, the exams will be hold 2 times/year and reexamination in all courses each time.

8-System of examination for postgraduate studies as follow:

- *Time of written exams, 3 hours for each curriculum have 3 hours or more for theoretical/ practical hours/ week. If the curriculum less than 3 hours / week, the time of exam is 2 hours only.
- * The final degree of each curriculum which have 3 hours (theoretical & practical) per week is 100 & less than 3 hours 50 degree & divided into 50 % for written ex. and 50 % for practical and oral exam.

9-Grades of graduation are as follow:	
Excellent	≥ 90 %
Very good	≥ 80 %
Good	≥70 %
Pass	≥60 %
Failed	45% to less than 60% weak
	Less than 45% very weak

Program aims – ILOS Matrix for the Diploma of Vet. Med. Sciences (poultry and rabbit). Program code: D5

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Program ILOs		Program aims					
		1. Apply acquired scientific knowledge in the field of poultry and rabbit diseases	2. Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.	3. Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.	4. Be qualified for the requirements of the veterinary and public health labor market, and aware of his/her role in community	5. Be qualified for admission to further postgraduate programmed (MVSc) in poultry and rabbit diseases	6. Effectively use the available facilities and resources and his develop information technology skills.
Knowledge and understanding	a.1. Know and be well informed about poultry and rabbit diseases and related sciences.	√	√		√		√
	a.2. Outline specialized theories and knowledge in the field of poultry and rabbit diseases and related sciences.	√		√	√		
	a.3. Identify the legal and moral rules in practices targeting diagnosis of poultry and rabbit diseases, poultry and rabbit pathology and microbiology, poultry and rabbit feeding and management and recognize veterinary professional practice regulations and ethics.	√	√	√			√

Program ILOs		Program aims					
		1. Apply acquired scientific knowledge in the field of poultry and rabbit diseases	2. Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.	3. Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.	4. Be qualified for the requirements of the veterinary and public health labor market, and aware of his/her role in community	5. Be qualified for admission to further postgraduate programmed (MVSc) in poultry and rabbit diseases	6. Effectively use the available facilities and resources and his develop information technology skills.
	a.4. Specify the different quality management systems in poultry raising.	√	√		√		
Intellectual skills	b.6. Detect and analyze problems facing poultry and rabbit and arrange them according to their priorities.	√	√	√			√
	b.7. Asses the different risk factors for each practice related to diagnosis of poultry and rabbit diseases to be able to make differential diagnosis	√	√	√			√
	b.8. Suggest the appropriate solutions for problems related to poultry and rabbit industry	√	√	√			
	b.9. Take decisions using the available information.	√	√	√	√		
Practical and professional skills	c.3. Apply different professional skills and techniques in diagnosis of poultry and rabbit	√		√	√	√	

Program ILOs		Program aims					
		1. Apply acquired scientific knowledge in the field of poultry and rabbit diseases	2. Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.	3. Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.	4. Be qualified for the requirements of the veterinary and public health labor market, and aware of his/her role in community	5. Be qualified for admission to further postgraduate programmed (MVSc) in poultry and rabbit diseases	6. Effectively use the available facilities and resources and his develop information technology skills.
	diseases.						
	c.4. Prepare a sheet for poultry farm history and write a diagnostic report for field cases.	√	√	√	√		
General and transferable skills	d.8. Communicate effectively using different means.	√		√			√
	d.9. Properly use the information technologies for development of his/her professional abilities.			√		√	√
	d.10. Assess him/herself and learn how to detect his/her learning requirements.			√			√
				√			√
	d.11. Use different facilities for gaining knowledge and information.			√		√	√
	d.12. Learn how to work effectively as part of a team and properly	√				√	√

Program ILOs		Program aims					
		1. Apply acquired scientific knowledge in the field of poultry and rabbit diseases	2. Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.	3. Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.	4. Be qualified for the requirements of the veterinary and public health labor market, and aware of his/her role in community	5. Be qualified for admission to further postgraduate programmed (MVSc) in poultry and rabbit diseases	6. Effectively use the available facilities and resources and his develop information technology skills.
	manage the time						
	d.13. Lead teamwork effectively				√		√
	d.14. Understand the significance and means of continuous self-learning.	√		√		√	√

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
Department of Nutrition & Clinical Nutrition

Course Specification

1- Basic information:		
Code No.: D5-E	Course title: Poultry and rabbit hygiene and nutrition	Academic Year: 1 st
Teaching Hours: Lecture: 2 Practical: 1 Total: 3		Specialization: Postgraduate Diploma of Poultry and rabbit

2- Overall aims of the Course:

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

- ❖ Apply acquired scientific knowledge in the field of poultry and rabbit nutritional requirements.
- ❖ Detect the current problems facing poultry and rabbit industry and suggest the appropriate solutions.
- ❖ Apply all professional skills and use the appropriate technological means in identification of poultry and rabbit nutritional disorders.
- ❖ Communicate effectively and lead teamwork efficiently.
- ❖ Take decisions using the available information.
- ❖ Effectively use the available facilities and resources.
- ❖ Aware of his/her role in community development and environmental conservation in the area of poultry and rabbit feeding.
- ❖ Commit the moral and legal rules of poultry and rabbit nutrition specialist.
- ❖ Aware of the importance of self development and continuous learning in the field of poultry and rabbit feeding.

3- Intended Learning Outcomes:

- a- Knowledge and Understanding **By successful completion of the course, the student should be able to:**
- a1. Recall information about poultry and rabbit nutrition, poultry feed stuffs and bases of poultry feed formulation.
 - a2. Outline specialized theories and knowledge in the field of poultry and rabbit nutrition and related sciences.
 - a3. Identify the legal and moral rules in practices targeting identification of poultry and rabbit nutritional disorders.
 - a4. Specify the different quality management systems in poultry feeding practices.
 - a5. Recognize the role of his/her professional practices in community development and environmental conservation.

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- a6. Describe the different poultry and rabbit feeding systems and control nutritional problems keeping healthy environment, protecting human health and developing the surrounding community.

b- Intellectual Skills **By successful completion of the course, the student should be able to:**

- b1. Detect and analyze problems facing poultry and rabbit nutrition and arrange them according to their priorities.
- b2. Suggest the appropriate solutions for problems related to poultry and rabbit industry.
- b3. Make scientific reading and analysis of research papers and topics related to poultry nutrition.
- b4. Assess different risk factors for each practice related to diagnosis of poultry and rabbit nutritional problems.
- b5. Take decisions using the available information.
- b6. Plan for ration formulation application in different poultry and rabbit conditions and develop an approach to solve a field problem.

c- Professional and Practical Skills: **By successful completion of the course, the student should be able to:**

- c1. Perfectly perform different conventional and advanced techniques in the field of nutritional requirements of poultry and rabbit.
- c2. Write and evaluate reports related to diagnosis of field cases of nutritional origin.
- c3. Assess different available tools and methods regarding diagnosis, prevention and control of different nutritional disorders.

d- General and Transferable Skills: **By successful completion of the course, the student should be able to:**

- d1. Communicate effectively using different means.
- d2. Properly use the information technologies for development of his/her professional abilities.
- d3. Assess him / her self and learn how to detect his/her learning requirements.
- d4. Use different facilities for gaining knowledge and information.
- d5. Learn how to work effectively as part of a team properly manages the time.
- d6. Lead teamwork effectively.
- d7. Understand the significance and means of continuous self learning.

4- Course Contents:

Week	Course description	Total (hr)	Lectures (hr)	Practical (hr)
1-3	Animal nutrition fundamentals Composition of the animal body and its food	6	6	-
4-7	Water and its metabolism Carbohydrates and their metabolism Proteins and their metabolism Lipids and their metabolism.	8	8	-
8-11	Minerals -Introduction, distribution and function -Deficiencies, supplements	8	8	-
12-15	Vitamins - Vitamin and animal health - Fat-soluble vitamins - Water-soluble vitamins	8	8	-
16-18	Feed intake and factors affecting	6	6	-
19-21	Digestion & absorption Digestibility of feeds	6	6	-
22-23	Feeding standards and nutritional requirements for: -maintenance -growth -fattening	4	4	-
24-26	-reproduction and egg production -fur production	6	6	-
27-29	Feeding poultry -Feeding broilers	6	6	-
30-31	-Feeding layers -Feeding water fowls	4	4	-
32-33	-Feeding rabbit	4	4	-
34	Feed additives- -Introduction	2	2	-
35-36	-Nutritional feed additives -Non Nutritional feed additives	4	4	-
1-4	Feedstuffs - Classification of feedstuffs - Nutrition terms	8	-	8

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5-9	-Concentrates as energy sources & deleterious factors -Plant protein sources & deleterious factors	10	-	10
10-12	-Animal protein sources and deleterious factors	6	-	6
13-16	-Feed processing and manufacture	8	-	8
17-20	Ration formulation for poultry	8	-	8
21-23	Feedstuffs analyses -Physical inspection	6	-	6
24-28	-Microscopical examination -Chemical analyses -Using standard feed analyses tables	10	-	10
29-31	Animal feed safety and feed manufacturing -Feed contaminants and its sources	6	-	6
32-34	-Environmental factors inducing feed deterioration -Mycotoxins and its importance -Pesticides	6	-	6
35-36	-Heavy metals -Feed manufacturing quality assurance and its monitoring	4	-	4
Total		144	72	72

<p>5- Teaching and Learning Methods:</p>	<ul style="list-style-type: none"> ● Lectures: Depends on the sharing efforts of the students and supported with macromedia and multimedia aids. ● Practical sections: <ul style="list-style-type: none"> - Identification of feedstuffs and their evaluation. - Laboratory feed inspection and chemical analysis. - Requirements calculation and ration formulation. ● Self learning: Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library. ● Training visits: Visits to poultry farms and poultry feed processing plants. ● Assays and reviews ● Discussion groups
<p>6- Teaching and Learning Methods for Handicapped:</p>	<p style="text-align: center;">Not applicable</p>

7- Students assessment:			
Methods of assessments:	Schedule	Weighing (degrees)	Intended learning outcomes
a) Written exam by the end of 1 st year	Week: 37, 38, 39	50	a1 to a6 b1 to b6
b) Practical exam by the end of 1 st year	Week: 36	30	a1 to a6 b1 to b6 c1 to c3
c) Oral exam by the end of 1 st year	Week: 37, 38, 39	20	a1 to a6 b1 to b6 c1 to c3 d1 to d7
8- List of References:			
a- Course notes:	Textbook of Animal and Poultry Nutrition – part 1 Practical of feedstuffs and ration formulation – part 1 Textbook of Animal and Poultry Nutrition – part 2 Practical of feedstuffs and ration formulation – part 2 Textbook of Human Nutrition and Animal Byproducts.		
b- Essential books:	a- McDonald, P.,R.A .Edwards and J.F.D. Greenhalgh (1987) , Animal Nutrition, 4th edition . b- Cheeke , P.R.(1991): Applied Animal Nutrition, Feeds and Feeding. C- Pond, W. G., D.C. Church, and K .R. Pond (1995): Basic Animal Nutrition and Feeding, 4th edition. d- Gillespie, J.R.(1987): Animal Nutrition and Feeding. e- Church, D .C. (1991): Livestock Feeds and Feeding 3rd edition. .		
c- Recommended books	a- Cheeke, P.R. (1987): Rabbit Feeding and Nutrition. b- National Research Council (1998): Nutrient Requirements of poultry, 7th rev. ed. Washington, D.C.: National Academy of Sciences. c-Feltwell and Fox (1998): Poultry feeds and feeding		

d- Periodicals, websites,.....etc	Journals - Journal of Nutrition - Journal of Animal Science - Journal of Agriculture Science - Nutrition Abstracts and Reviews - Journal of Poultry Science - Journal of small ruminant Nutrition - Veterinary Record - American Journal of veterinary research - Research on veterinary Science Web sites:- www.google.com - www.FAO - www.Sciencedirect.com - www. Net veterinary resources- www. veterinary and agricultural web resources, livestock and poultry
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Course Coordinator

Name: Dr. Ibrahim M. Ibrahim

Sig. :

Date :

Head of Department

Prof.Dr. Elham Saleh

Beni-Suef University
Faculty of Veterinary Medicine
Department of Nutrition and Clinical Nutrition

Course title : Poultry and Rabbit Diseases
Course code: D5-E

Course Matrix for Achievement of Intended Learning Outcomes

Topics	Wk	Knowledge and Understanding	Intellectual Skills	Practical and Professional Skills	General & Transferable Skills
1 Animal nutrition fundamentals Composition of the animal body and its food	1-3	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d1, d2
2 Water and its metabolism Carbohydrates and their metabolism Proteins and their metabolism Lipids and their metabolism.	4-7	a1, a2, a3	b1,b2,b3,b4	-	d1, d2
3 Minerals -Introduction, distribution and function -Deficiencies, supplements	8-11	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d1, d2, d3
4 Vitamins - Vitamin and animal health - Fat-soluble vitamins - Water-soluble vitamins	12-15	a1, a2, a3	b1,b2,b3,b4	-	d1, d2, d3
5 Feed intake and factors affecting	16-18	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d3, d4, d5
6 Digestion & absorption Digestibility of feeds	19-21	a1, a2, a3, a6	b1,b2,b3,b4	-	d2, d3, d4, d5
7 Feedstuffs - Classification of feedstuffs - Nutrition terms	1-4	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d3, d4, d5
8 -Concentrates as energy sources & deleterious factors -Plant protein sources & deleterious factors	5-9	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d3, d4, d5,d6
9 -Animal protein sources and deleterious factors	10-12	a1, a2, a3	b1,b2,b3,b4,b6	-	d3, d4, d5,d7
10 -Feed processing and manufacture	13-16	a1, a2, a3, a6	b1,b2,b3,b4,b6	-	d2, d4, d5
11 Feeding standards and nutritional requirements for: -maintenance	22-23	a4, a5	b1, b2, b5	-	d2, d4, d5

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	-growth -fattening					
12	-reproduction and egg production -fur production	24-26	a4, a5, a6	b1, b2, b5	c1, c2, c3	d2, d4, d5
13	Feeding poultry -Feeding broilers	27-29	a4, a5, a6	b1, b2, b5	c1, c2, c3	d2, d4, d5
14	-Feeding layers -Feeding water fowls	30-31	a4, a5, a6	b1, b2, b5	c1, c2, c3	d2, d4, d5
15	-Feeding rabbit	32-33	a4, a5, a6	b1, b2, b5	c1, c2, c3	d2, d4, d5
16	Ration formulation for poultry	17-20	a4, a5, a6	b1, b2, b5	c1, c2, c3	d2, d4, d5
17	Feed additives- -Introduction	34	a4, a5	b1, b2, b5	c1, c2, c3	d2, d4, d5
18	-Nutritional feed additives -Non Nutritional feed additives	35-36	a4, a5	b1, b2, b5	c1, c3	d2, d4, d5
19	Feedstuffs analyses -Physical inspection	21-23	a4, a5, a6	b1, b2, b5	c1,c3	d2, d4, d5,d7
20	-Microscopical examination -Chemical analyses -Using standard feed analyses tables	24-28	a4, a5, a6	b1, b2, b5	c1, c3	d2, d4, d5,d7
21	Animal feed safety and feed manufacturing -Feed contaminants and its sources	29-31	a4, a5, a6	b1, b2, b5	c1, c3	d2, d4, d5,d7
22	-Environmental factors inducing feed deterioration -Mycotoxins and its importance -Pesticides	32-34	a4, a5, a6	b1, b2, b5	c1, c3	d2, d4, d5
23	-Heavy metals -Feed manufacturing quality assurance and its monitoring	35-36	a4, a5	b1, b2, b5	c1, c2, c3	d2, d4, d5
Student activity		Along the course	a1, a2, a3, a4	b1, b2, b3	c3, c4	d1, d2, d3, d4,d7



Course specification of postgraduate

1-Basic information

Course Code:	
Course title :	Microbiology of poultry and rabbits.
Program title:	Diploma of Poultry and Rabbit Diseases.
Contact hours/ week	4 hours per week (2hr lecture and 2hr practical).
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

This course aims to provide the postgraduates with the basic knowledge, skills and attitudes that allow them to deal with bacterial and viral diseases could affect poultry and rabbits.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

By the end of the course, students will be able to:

- a.1- Distinguish microbial causes of diseases affecting poultry
- a.2- Identify the morphology, culture, antigenic structure and virulence factors of microorganisms affecting poultry
- a.3- Recognize the basics of antimicrobial uses and resistance

b-Intellectual skills

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

- b.1- Diagnose different bacterial and viral diseases infecting poultry and rabbits
- 2.2- Detect the danger of handling and use of infectious agents on community and environment as a part of their ethical heritage
- b.3- Analyze scientific as well as clinical information, conflicting data and hypotheses
- b.4- Suggest the solutions of the problems concerning with different bacterial and viral diseases infecting poultry and rabbits.

C- Professional and practical skills

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

- C.1- Collect the suitable specimens at the suitable time from poultry and rabbits.
- C.2. Interpret results of microbiological tests and reports.
- C.3- Determine the sensitivities of the causative microorganism to suggested drugs

d- General and transferable skills

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

- d.1- Work in a teamwork and manage time.
- d.2- Manage change effectively and respond to changing demands.
- d.3- Create responsibility for personal and professional learning and development (Personal Development Planning).
- d.4- Use the internet to get information.



Course specification of postgraduate

III- Contents

4-Topics and contents

course	Topic	No. of hours	Lectures	Practical
1- General and Systemic bacteriology	General bacteriology (morphology, anatomy and virulence factors)	16	16	-
	Gram positive bacteria infecting poultry and their antimicrobial sensitivity.	20	8	12
	Gram negative bacteria infecting poultry and their antimicrobial sensitivity.	20	8	12
	Gram positive bacteria infecting rabbits and their antimicrobial sensitivity.	20	8	12
	Gram negative bacteria infecting rabbits and their antimicrobial sensitivity.	20	8	12
2- Systemic and Diagnostic virology	Systemic virology of poultry (picornaviruses – orthomyxoviruses- paramyxoviruses-coronaviruses- Birnaviruses-Reoviruses- Herpesviruses-Poxviruses- Adenoviruses)	24	24	-
	Diagnostic virology	24	-	24
Total		144	72	72

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (computer researches and library)
- 5.3- Practical (examining samples of stained bacterial films)

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
Writing Exam	a1- a2	b1- b3- b4	c2- c3-	d2-d3
Practical Exam	a2- a3	b2- b3	c1- c2- c3-	d2-d3



Course specification of postgraduate

Oral Exam	a1- a2- a3-	b1- b2- b3-b4	c2- c3-	d1-d2-d3
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6.2. Assessment schedules

Method	Week(s)
Writing exam	45-48
Practical exam	45-48
Oral exam	45-48

6.3. Weight of assessments

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

7- List of references

7.1. Notes and books:

Departmental notes on:

7.1.1- Bacteriology, Mycology and Immunology.

7.1.2- Practical Bacteriology, Mycology and Immunology.

7.2. Essential books:

7.2.1- Bergey's Manual of Systematic Bacteriology, 4th Edition Noel R. Krieg, John G. Holt, and Murray R. G. E. 1984.

7.2.2- Prescott, Harley and Klein's Microbiology. J. M. Willey, L. M. Sherwood, and C. J. Woolverton – 17th Edition, International Edition, 2008, Mc Graw Hill

7.2.3- Bergey's Manual of Determinative Bacteriology, 9th Edition John G. Holt, 1993

7.2.4- Diagnostic Microbiology, 2nd Edition 2000 Connie R. Mahon and George Manuselis.

7.3. Recommended text books:

7.3.1- Clinical Veterinary Microbiology, P.J. Quinn, M.E. Carter, B. Markey and G.R. Carter, 6th Editio2004

7.3.2- Veterinary Microbiology, Dwight C. Hirsh and Yuan Ghung Zee, 1999

7.3.3- Medical Microbiology, R. Cruickshank 1986.

7.3.4- Mackie and McCartney Medical Microbiology, 14th Edition 1992 (J. P. Duguid, B.P. Marmion and R. H. A. Swain). (The book present in the faculty library)

7.3.5- Topley & Wilson microbiology and microbial infections, 9 th edition

7.4. Journals, Websitesetc



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

Avian diseases

Journal of Bacteriology

Microbiology

Microbiology and Immunology

Journal of Microbiology, Immunology and Infection

BMC Microbiology

Brazilian Journal of Microbiology

Microbiology and Molecular Biology Reviews

Internet Journal of Microbiology

Polish Journal of Microbiology

Journal of Microbiology and Biotechnology

African Journal of Microbiology Research

International Journal of Microbiology

Iranian Journal of Microbiology

Websites

<http://www.sciencedirect.com>.

<http://www.Pubmed>.

<http://www.Altavista>.

<http://www.cellsalive.com>.

<http://www.textbookofbacteriology.net>.

http://www.ourfood.com/General_bacteriology.html

<http://www.Veterinary Microbiology>

Course Coordinators

Dr. Hala Sayed Hassan

Ass. Prof. of Bacteriology, Mycology Immunology,
Faculty of Veterinary Medicine,
Beni-Suef University

Dr. Ahmed Saad mostafa

Ass. Prof. of Virology, Faculty of Veterinary Medicine,
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Head of Department

Prof. Dr. Ismail Abd El-Hafeez Radwan

Professor and Head of Bacteriology, Mycology and
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Medicine, Beni-Suef University

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Professor and Head of Virology department, Faculty of
Veterinary Medicine, Beni-Suef University



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate



Course specification

	Topics	week	Intended learning outcomes of course (ILOs)			
			K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
1	Histology of lab animal General bacteriology (morphology, anatomy and virulence factors)	1 st w- 4 th w	a1,a2,a3	b1,b2,b3,b4	c1,c2,c3	d1,d2,d3,d4
2	Gram positive bacteria infecting poultry and their antimicrobial sensitivity.	5 th w- 9 th w	a1,a2,a3	b1,b2,b3,b4	c1,c2,c3	d1,d2,d3,d4
3	Gram negative bacteria infecting poultry and their antimicrobial sensitivity.	10 th w- 14 th w	a1,a2,a3	b1,b2,b3,b4	c1,c2,c3	d1,d2,d3,d4
4	Gram positive bacteria infecting rabbits and their antimicrobial sensitivity.	15 th w- 19 th w	a1,a2,a3	b1,b2,b3,b4	c1,c2,c3	d1,d2,d3,d4
5	Gram negative bacteria infecting rabbits and their antimicrobial sensitivity.	20 th w-24 th w	a1,a2,a3	b1,b2,b3,b4	c1,c2,c3	d1,d2,d3,d4
6	Systemic virology of poultry	25 th w-36 th w	a1,a2	b1,b2,b3,b4	c1,c2	d1,d2,d3,d4
7	Diagnostic virology	25 th w-36 th w	a1,a2	b1,b2,b3,b4	c1,c2	d1,d2,d3,d4



Beni Suef University
Faculty of Veterinary Medicine



University: Beni-Suef University, Egypt.

Faculty: Faculty of Veterinary Medicine.

Departments: Pathology

Course specification

A- Administrative Information:

Course Code:	D5
Course title :	Pathology of poultry and rabbit.
Academic year:	Postgraduate students.
Program title:	Diploma of Vet. Med. Sciences (poultry and rabbit).
Degree:	Diploma.
Contact hours/ week	4 hours per week (2hr theoretical and 2hr practical).
Course coordinator:	Dr. EL-Shaymaa Nabil EL-Nahass
External evaluator(s)	Prof. Dr. Sary Khalil
Date of course approval:	September, 2017

B-Professional information

1- Overall aims of course:

This course aims to:

- .Identify Pathological changes in relation to viral, bacterial, mycotic and parasitic infectious diseases as well nutritional disorders in poultry to help for diagnosis.
- .Acquire Mechanism, by which the disease developed, progressed and squealed.
- .Understand the mechanisms of pathological alterations

2- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

By the end of this course the graduate should be able to:-

- a.1. Recall Knowledge about the molecular and cellular response of the living body when exposed to injurious agent
- a.2. Enumerate the diseases of poultry according to the causative agents
- a.3. Outline the relationship between causes and tissue/organ changes.
- a.4 Describe the macroscopic & microscopic tissue changes during poultry diseases.
- a.5. Recognize Knowledge about typing and classification of different tissue/organ changes.
- a.6 Illustrate the pathogenesis of the poultry disease

b- Intellectual skills:

By the end of studying this course, the graduate should be able to:-

- b1. Discriminate between tissue/organ appearance in health and diseased poultry and rabbit.



- b.2. Differentiate between the different pathological alterations in poultry diseases
- b.3. Score the macroscopic and microscopic pathological lesions
- b.4. Interpret correctly the pathological data obtained the macroscopic and microscopic examination to reach final diagnosis.
- b.5. Integrate the pathological alterations with injurious agents

c-Professional and practical skills

By the end of studying this course, the graduate should be able to:-

- c.1. Select the necessary techniques for sample reception & processing according to the nature of specimen received.
- c.2. Examine and identify the macroscopic criteria of the pathological alterations.
- c.3. Examine and identify the microscopic criteria of the pathological alterations
- c.4. Perform diagnosis and full description for the pathological picture based on the gross and histopathological examination
- c.5. Write a report commenting on pathological avian specimens

D-General and Transferable skills (GTs)

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

- d.1. Demonstrate the ability of problem definition
- d.2. Utilize the computer, microscope and internet
- d.3. Use data analysis and communication skills
- d.4. Utilize various computer based instruction tools and E-learning of Pathology and utilize a variety of computer-based self-assessment tools.
- d.5. Use the sources of biomedical information available to remain current with advances in knowledge and practice
- d.6. manage time and work group
- d.7. own self and continuous learning

3- Topics and contents

Course	Topic	Total no. of hours	Lect.	Pract.
Postgraduate students Pathology of poultry and rabbit diseases 4 hours / week (Lec. 2hr/wk - Pract. 2hr/wk)	1. Introduction in pathology and histopathological techniques	12	6	6
	2- General bases of pathological alterations (dist. In cell metabolism, Cell death, dist. In circulation, inflammation and healing and general tumors)	28	14	14
	3. Pathology of viral diseases.	16	8	8
	4. Pathology of bacterial diseases	16	8	8
	5. Pathology of parasitic diseases	12	6	6
	6. Pathology of mycotic diseases	16	8	8
	7. Pathology of nutritional diseases	16	8	8
	8. Postmortem examination (necropsy, organ weights, collection of tissue and organ specimens for microscopic examination.)	16	8	8
	9-.Activities	12	6	6



Total	144	72	72
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4-Teaching and learning methods

5.1. Lectures (brain storming, discussion) in which one or more of the following facilities are used:

- 5.1.1. White board and data-show presentations.
- 5.1.2. Educational animal models, bones and preserved specimens.
- 5.1.3. Illustrations, anatomical charts, CD's, PowerPoint slides and recorded anatomy videos.

5.2. Laboratory sessions in which one or more of the following facilities are used:

- 5.2.1. Tutor presentation followed by students' small group sessions.
- 5.2.2. Freshly died cadavers of laboratory animals.
- 5.2.3. Educational models.
- 5.2.4. Prepared bones from euthanatized animals.
- 5.2.5. Demonstrating formalin preserved cadavers.

5.3. Independent (laboratory and home assignments supervised by tutor)

- 5.3.1. Writing reports and assignments (computer researches and faculty library attendance).
- 5.3.2. Preparation of colored posters and slide presentation.
- 5.3.3. Preparation of bones and preserving specimens.
- 5.3.4. Group discussion.

5-Student assessment

5.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a2, a3,a4,a5,a6	B1, b2, b3,b4, b5,		d1
Practical Exam	-	b2, b3, b4, b5	c1, c2, c3, c4, c5	d1, d2, d3 ,d6,d7
Oral Exam	a1,a2-a3,a4,a6	B1-b5	c2c3, c4, c5	d1,d2, d3,d5

5.2. Assessment schedules/semester:

Method	Week(s)
Practical exams	Managed by department administration
Written exams	Managed by faculty administration
Oral Exams	Managed by department administration

5.3. Weight of assessments:

Assessment	Weight of assessment
Practical and oral exams	50%
Written exams	50%
Total	100%



6- List of references

8.1. Notes and books:

None

8.2. Essential books:

- Jubb,K.V., P.C.Kennedy and N.Palmer (1993) Pathology of Domestic Animal, 6th ed. San Diego, New York
- Jones, T.C., Hunt, R.D. and King, N.W (2008) Veterinary pathology , 8th ed. Williams and wilkins, Waverly company (2008)
- Gallin, J. and Synder , R (2010), In ammation 3rd. ed. Lippincott Williams,Wilkins. Philadelphio
- Ramz-I S. and Kumar, V. and Collin, T. (1999) Pathological Basis of Disease , 6thed .

**These book is available in the library of faculty of Veterinary Medicine, Beni-Suef Univ.*

8.3. Recommended textbooks:

8.3.1. R.S. Chauhan (2010) Text Book of veterinary pathology. 1st. ed. IBDC publishers **This book is available online.*

8.3.1 Jaap Van Dijk, Erik Gruys, and Johan Mouwen, COLOR ATLAS OF VETERINARY PATHOLOGY (2006) 2nd ed., Saunders Ltd

8.3.2. Richert, G and Epstein , M. (international review of experimental pathology)

8.3.4. Saif, YM; Fadly, AM; Glisson,JR; McDougald, LR; Nolan, LK and Swayne, DE (Eds.), Diseases of poultry. (12th Edn.),Ames, IA, Iowa State University Press. PP: 153-184.

8.4. Journals, Websitesetc

Journals

- Egyptian Journal of Comparative Pathology and Clinical Pathology
- PathologiaVeterinaria
- American Journal of Pathology
- Journal of Pathology and Bacteriology
- Archive of Pathology
- Veterinary Record
- Journal of Comparative Pathology
- Canadian Journal of comparative Medicine
- American Journal of veterinary research
- Research on veterinary Science
- Beni-Suef Veterinary Medical journal

<http://www.bsuv.bsu.edu.eg/vetmed.aspx#>

Websites

[Google searchwww.google.com](http://www.google.com)

[Sciencedirecthttp://www.sciencedirect.com.](http://www.sciencedirect.com)

[Pubmedhttp://www.Pubmed.](http://www.Pubmed)

[Colorado State university onlinehttp://www.online.colostate.edu/courses/VS/VS333.dot](http://www.online.colostate.edu/courses/VS/VS333.dot)

[The university of adelaidehttps://www.adelaide.edu.au/course-outlines/104377/1/sem-1/](https://www.adelaide.edu.au/course-outlines/104377/1/sem-1/)

[VET Veterinary Educational Toolshttp://www.cvmb.colostate.edu/vetneuro/](http://www.cvmb.colostate.edu/vetneuro/)

[Education platformhttp://ivsascove.wix.com/eduplatform#!anatomy-hist-embr/ctsm](http://ivsascove.wix.com/eduplatform#!anatomy-hist-embr/ctsm)

[http/cms.nelc.edu.eg](http://cms.nelc.edu.eg)



**Beni-Suef University
Faculty of Veterinary Medicine**



www.asvp.asn.au.com

www.genengnews.com

www.altcancer.com

Course Coordinator

Dr. EL-Shaymaa Nabil EL-Nahass

Lecturer of pathology
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Beni-Suef University

Head of the department

Prof. Dr. Khalid Ali El-Nesr

Professor and Head of pathology department,
Faculty of Veterinary Medicine,
Beni-Suef University

Course specification Matrix

		Topic	Week	Intended learning outcomes of course (ILOs)			
				K&U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Postgraduate students	Pathology of poultry and rabbit diseases 4 hours / week (Lec. 2hr/wk - Pract. 2hr/wk)	1. Introduction in pathology and histopathological techniques	1-6	1,2,3	1,2,4,5	-	-
		2- General bases of pathological alterations(dist. In cell metabolism, Cell death, dist. In circulation, inflammation and healing and general tumors)	7-20	1,2,4, 5	2,3,4,5	1,3,5	1-7
		3. Pathology of viral diseases.	21-28	2,3,4,,5,6	2,3,5	1, 2,3,4,5	
		4. Pathology of bacterial diseases	29-36	2,3,4,,5,6	2,3,5	1, 2,3,4,5	
		5.Pathology of parasitic diseases	37-42	2,3,4,,5,6	2,3,5	2,3,4,5	
		6.Pathology of mycotic disease	43-50	2,3,4,,5,6	2,3,5	1, 2,3,4,5	
		7.pathology of nutritional disease	51-58	2,3,4,,5,6	2,3,5	1, 2,3,4,5	
		8. Postmortem examination (necropsy, organweights, collection of tissue and organ specimens for microscopic examination.)	59-66	4	3,4,5	1, 2,3,4,5	
		9-.Activities	66-72	1,4	1,2,4	1, 2,3,4,5	



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	D5-A
Course title :	Poultry and rabbit diseases
Program title:	Diploma of Vet. Med. Sciences (poultry and rabbit)
Contact hours/ week	4 hours per week (2 theoretical and 2 practical)
Approval Date	02-10-2018

2-Professional information

Overall aims of course:

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

- 1- Apply acquired scientific knowledge in the field of poultry and rabbit diseases.
- 2- Identify different problems facing poultry and rabbit industry and suggest the appropriate solutions.
- 3- Use the acquired professional skills and the appropriate analytical and technological means in diagnosis of poultry and rabbit diseases.
- 4- Be qualified for the requirements of the veterinary and public health labor market.
- 5- Be qualified for admission to further postgraduate programmes (MVSc) in poultry and rabbit diseases.
- 6- Effectively use the available facilities and resources and his develop information technology skills.
- 7- Communicate effectively and lead teamwork efficiently.
- 8- Aware of his/her role in community development and environmental conservation in the field of poultry and rabbit.
- 9- Aware the importance of self-development and continuous learning.

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. Know and be well informed about poultry and rabbit diseases and related sciences.
- a.2. Outline specialized theories and knowledge in the field of poultry and rabbit diseases and related sciences.
- a.3. Identify the legal and moral rules in practices targeting diagnosis of poultry and rabbit diseases, poultry and rabbit pathology and microbiology, poultry and rabbit feeding and management and recognize veterinary professional practice regulations and ethics.
- a.4. Specify the different quality management systems in poultry raising.

b-Intellectual skills

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

- b.1. Detect and analyze problems facing poultry and rabbit and arrange them according to their priorities.



Beni-Suef University
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Course specification of postgraduate

- b.2. Asses the different risk factors for each practice related to diagnosis of poultry and rabbit diseases to be able to make differential diagnosis.
 - b.3. Suggest the appropriate solutions for problems related to poultry and rabbit industry.
 - b.4. Take decisions using the available information.
-

C- Professional and practical skills

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

- c.1. Apply different professional skills and techniques in diagnosis of poultry and rabbit diseases.
- c.2. Prepare a sheet for poultry farm history and write a diagnostic report for field cases.

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. Assess him/herself and learn how to detect his/her learning requirements.
 - d.4. Use different facilities for gaining knowledge and information.
 - d.5. Learn how to work effectively as part of a team and properly manage the time.
-
- d.6. Lead teamwork effectively.
 - d.7. Understand the significance and means of continuous self-learning.



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
Poultry and rabbit diseases (Lec. 2h./week, Pract 2h./week)	Bacterial diseases of poultry and Rabbit	16	16	-
	Immunity against bacterial diseases	4	4	
	Mycotic diseases and mycotoxicosis in poultry and rabbit	6	6	-
	Viral diseases of poultry and Rabbit	16	16	-
	Immunity against viral diseases	4	4	-
	Parasitic diseases of poultry and Rabbit and their maintenance in the environment	6	6	-
	Nutritional diseases of poultry and Rabbit	4	4	-
	Miscellaneous diseases and vices of poultry	4	4	-
	How to handle poultry and rabbit pathogens having zoonotic significance (legal and scientific rules)	4	4	-
	Principles of disease prevention and control	8	8	-
	Sampling, sample preparation and preservation	4	-	4
	Clinical and postmortem examination of field samples	8	-	8
	Bacteriological examination of poultry and Rabbit diseases and antimicrobial sensitivity testing	6	-	6
	Mycotic examination and detection of mycotoxins	4	-	4
	Virological examination of poultry and Rabbit diseases	8	-	8
	Parasitological examination of poultry and Rabbit diseases	4	-	4
	Advanced laboratory techniques	6	-	6
	Differential Diagnosis of poultry and rabbit diseases	4	-	4
	Biosecurity and medication in poultry and Rabbit farms	8	-	8
	Different drugs interaction in the field of poultry diseases	4	-	4
	Disinfection of poultry houses	4	-	4
	Vaccines and vaccination schedules in poultry farms	8	-	8
	Estimation of immunity against viral and bacterial diseases of poultry and rabbit	4	-	4
	Student activities:			
- Writing assays	-	-	-	
- Internet search	-	-	-	
Total		144	72	72



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

5-Teaching and learning methods

- 5.1. **Lectures** (brain storm, discussion) using board, data shows 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 research on related websites, international, national and local journals, 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	b1, b2, b3, b4		
Practical Exam	a1, a2, a3, a4	b1, b2, b3, b4	c1, c2	
Oral Exam	a1, a2, a3, a4	b1, b2, b3, b4	c1, c2	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%



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

7- List of references

7.1. Notes and books

7.2. Essential books:

Diseases of Poultry, 13th ed. Iowa State Univ. Press, Ames. BY John R. Glisson, Larry R. McDougald, Lisa K. Nolan, David L. Suarez, Venugopal Nair and David E. Swayne

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.

7.4. Journals, Websitesetc

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

Dr Azza A. El-Sawah



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

	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 / week (Lec. 2hr/wk - Pract. 2hr/wk)	1	Bacterial diseases of poultry and Rabbit	1-8	1, 2, 3, 4	1, 2, 4	-	1, 2, 3, 4, 5, 6, 7
	2	Immunity against bacterial diseases	9-10	1, 2, 3, 4	1, 2, 4	-	
	3	Mycotic diseases and mycotoxicosis in poultry and rabbit	11-13	1, 2, 3, 4	1, 2, 4	-	
	4	Viral diseases of poultry and Rabbit	14-21	1, 2, 3, 4	1, 2, 4	-	
	5	Immunity against viral diseases	22-23	1, 2, 3, 4	1, 2, 4	-	
	6	Parasitic diseases of poultry and Rabbit and their maintenance in the environment	24-26	1, 2, 3, 4	1, 2, 4	-	
	7	Nutritional diseases of poultry and Rabbit	27-28	1, 2, 3, 4	1, 2, 4	-	
	8	Miscellaneous diseases and vices of poultry	29-30	1, 2, 3, 4	1, 2, 4	-	
	9	How to handle poultry and rabbit pathogens having zoonotic significance (legal and scientific rules)	31-32	1, 2, 3, 4	1, 2, 4	-	
	10	Principles of disease prevention and control	33-36	1, 2, 3, 4	1, 2, 4	-	
	11	Sampling, sample preparation and preservation	1-2	1, 2, 3, 4	1, 2, 4	-	
	12	Clinical and postmortem examination of field samples	3-6	1, 2, 3, 4	1, 2, 4	1, 2	
	13	Bacteriological examination of poultry and Rabbit diseases and antimicrobial sensitivity testing	7-9	1, 2, 3, 4	1, 2, 4	1, 2	
	14	Mycotic examination and detection of mycotoxins	10-11	1, 2, 3, 4	1, 2, 4	1, 2	
	15	Virological examination of poultry and Rabbit diseases	12-15	1, 2, 3, 4	1, 2, 4	1, 2	
	16	Parasitological examination of poultry and Rabbit diseases	16-17	1, 2, 3, 4	1, 2, 4	1, 2	
	17	Advanced laboratory techniques	18-20	1, 2, 3, 4	1, 2, 4	1, 2	
	18	Differential Diagnosis of poultry and rabbit diseases	21-22	1, 2, 3, 4	1, 2, 4	1, 2	
	19	Biosecurity and medication in poultry and Rabbit farms	23-26	1, 2, 3, 4	1, 2, 4	1, 2	
	20	Different drugs interaction in the field of poultry diseases	27-28	1, 2, 3, 4	1, 2, 4	1, 2	
	21	Disinfection of poultry houses	29-30	1, 2, 3, 4	1, 2, 4	1, 2	
	22	Vaccines and vaccination schedules in poultry farms	31-34	1, 2, 3, 4	1, 2, 4	1, 2	
	23	Estimation of immunity against viral and bacterial diseases of poultry and rabbit	35-36	1, 2, 3, 4	1, 2, 4	1, 2	
	Student activity	Along the course	1, 2, 3, 4	1, 2, 3, 4	2		



Beni-Suef University
Faculty of Veterinary Medicine
Parasitology department.

Course specification of postgraduate

1-Basic information

Course Code:	
Course title :	Parasites of Poultry and Rabbits.
Program title:	Diploma of Poultry and Rabbit Diseases.
Contact hours/ week	4 hours per week (2hr theoretical and 2hr practical)
Approval Date	

2-Professional information

Overall aims of course:

The post graduate student of this diploma could be able to:

- Identify helminths infecting birds and rabbits (morphology and life cycle).
- Recognize arthropods infecting birds and rabbits (morphology and life cycle).
- Differentiate protozoa infecting birds and rabbits (morphology and life cycle).
- Be aware about diagnosis, control and how to treat different parasites of poultry and rabbits.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Identify signs of parasitic infections.
- a2. Describe morphology and life cycle of helminths infecting birds and rabbits.
- a3. Identify morphology and life cycle of arthropods affecting poultry and rabbits.
- a4. Write about morphology and life cycle of protozoa infecting birds and rabbits.
- a5. Summarize different methods of parasite diagnosis.
- a6. Recognize treatment and control of different parasites of poultry and rabbits.

b. Intellectual skills

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

- b1. Differentiate various parasitic affections of helminths infecting birds and rabbits.
- b2. Compare between different arthropods and protozoa infecting birds and rabbits.
- b3. Correlate the different methods of diagnosis.
- b4. Interpret results of diagnosis.
- b5. Relate the proper treatment and control of different parasites infecting poultry and rabbits.

C- Professional and practical skills

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

- c1. Obtain samples for different parasitological diagnostic purposes.
- c2. Manage samples preservation for immediate or further examination.
- c3. Perform the different techniques of examination and diagnosis.
- c4. Write a scientific report about results of diagnosis.



Beni-Suef University
Faculty of Veterinary Medicine
Parasitology department.

Course specification of postgraduate

d- General and transferable skills

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

- d1. Work effectively in a team.
- d2. Use efficiently source of knowledge.
- d3. Able to transfer the experience to others.
- d4. Characterize and differentiate various parasitic affections.

4-Topics and contents

Course	Topic	No. of hours	Lectures	Practical
1-10	Helminths: Helminths infecting birds and rabbits (morphology and life cycle) (theoretical and practical studies).	40	20	20
11-20	Arthropods: Arthropods infecting birds and rabbits (morphology and life cycle) (theoretical and practical studies).	40	20	20
21-30	Protozoa: Protozoa infecting birds and rabbits (morphology and life cycle) (theoretical and practical studies).	40	20	20
31-36	Diagnosis and control: Different methods of diagnosis and control (Obtain samples for different parasitological diagnostic purposes, manage samples preservation, perform the different techniques of examination and diagnosis and write a scientific report).	24	12	12
Total		144	72	72

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows.
- 5.2- Self learning by preparing essays and presentations (computer researches and library).
- 5.3- Practical (models, samples of stained tissues and data show).
- 5.4- Video movies for students of special needs.



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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, a4, a5, a6	b1, b2,b3, b4, b5,	-	d1
Practical Exam	a1, a2, a3, a4, a5,	b1, b2, b3, b4, b5,	c1, c2, c3, c4,	d1, d2, d3, d4
Oral Exam	a1-	b1-b2, b3, b4,	-	d1,d2, d3,d4,

6.2. Assessment schedules

Method	Week(s)
Practical exams	Managed by department administration
Written exams	Managed by faculty administration
Oral Exam	Managed by department administration

6.3. Weight of assessments

Assessment	Weight of assessment
Practical exams	25%
Written exams	50%
Oral Exam	25%
total	100%

7- List of references

7.1. Notes and books

7.2. Essential books:

Helminths, Protozoa and Arthropods of Domesticated Animals: Soulsby, E.J.L., 7th edition. Bailliere Tindall, London, (1982).

ASA Handbook on poultry diseases Simon M. Shane, FRCVS, PhD, MBL, ACPV North Carolina State University Printed in Singapore, 2005

- Handbook on Poultry Diseases 2nd Edition Copyright©2005 by American Soybean Association

-The Epidemiology, Diagnosis and Control of Poultry Parasites. Permin and Jørgen W. Hansen Anders Permin and Jørgen W. Hansen

-Field Manual of Wildlife Diseases General Field Procedures and Diseases of Birds Biological Resources Division Information and Technology Report 1999-001

Milton Friend and J. Christian Franson, Technical Editors

Elizabeth A. Ciganovich, Editor Phillip J. Redman, Design and layout Rosemary S. Stenback, Illustrator

-Domestic Rabbits Disease and parasite, 2008, PNW,8.3. Recommended texts



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Parasitology for Veterinarians, Veterinary Clinical Parasitology.

7.3. Journals, Websitesetc

Journals: Veterinary Parasitology.

Egyptian Veterinary Medical Society of Parasitology Journal.

Websites:

<http://www.journals.elsevier.com/veterinary-parasitology/>

International journal of Poultry science, World poultry Science, British Poultry Science, Poultry Science.

<http://www.dpd.cdc.gov/dpdx/>

www.tulane.edu/~wiser/protozoology/

Course Coordinators

Head of Department



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Course specification

	Topics	week	Intended learning outcomes of course (ILOs)			
	1 st semester		K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
1	Helminths: Helminths infecting birds and rabbits (theoretical and practical studies).	1-10	1,2,3,4,5,6,	1,2,3,4,	1,2,3,4,5,6	1,2,3,4
2	Arthropods: Arthropods infecting birds and rabbits (theoretical and practical studies).	11-20	1,2,3,4,5,6	1,2,3,4,5,	1,2,3,4,	1,2,3,4
3	Protozoa: Protozoa infecting birds and rabbits (theoretical and practical studies).	21-30	1,2,3,4,5,6,	1,2,3,4,5,	1,2,3,4,	1,2,3,4
4	Diagnosis and control: Different methods of diagnosis and control (Obtain samples for different parasitological diagnostic purposes, manage samples preservation, perform the different techniques of examination and diagnosis and write a scientific report).	31-36	1,2,3,4,5,6,	1,2,3,4,5,	1,2,3,4,	1,2,3,4



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