



Beni Suef University
Faculty of Veterinary Medicine
Department of Hygiene, Management and Zoonoses

Program Specification for Master Degree
2017-2018

A-Basic information:

- 1- Program title:** *MVSC., Master degree of veterinary science (Animal, Poultry and Environnemental Hygiène)*
- 2- Program type:** *Single*
- 3- Department offering program:** Dept. of Hygiene, Zoonoses and Epidemiology
- 4-Academic year:** *2017-2018*
- 5-Approval date of Department Council:**
- 6-Approval date of Faculty Council:**
- 7-External evaluator:**

B-Professional information:

1- Main goal of the program:

This program aims to prepare master students that are certified locally and internationally in the field of animal, poultry and environmental hygiene in research training at the Master's level that meet the needs of the market of veterinary medicine.

2- Overall aims of the program:

1. Enable master students to achieve competency in modern laboratory technology.
2. Allow master students to develop practical research project related to environmental hygiene and preventive medicine.
3. Develop the ability of master students to engage critically with scientific literature and to critically review and present their own research data.
4. Employ the acquired knowledge in Environmental hygiene and preventive medicine together with other related sciences in his/her professional practices.
5. Comprehend awareness about current problems and recent theories in the field of environmental hygiene and preventive medicine
6. Identify the practical problems related to environmental hygiene and preventive medicine and their solutions.
7. Master different professional skills and techniques in the field of environmental hygiene and preventive medicine

8. Improve master students ability to take decisions in different professional and practical contexts.

Intended learning outcomes of course (ILOs):

a- Knowledge and understanding:

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

- a1- Comprehend specialized theories and knowledge in the field of Animal, Poultry and Environmental Hygiene and related sciences.
- a2- Familiarize the legal and moral rules in Animal, Poultry and Environmental Hygiene practices.
- a3- Illustrate the different sources and ways of spreading of diseases.
- a4- Illustrate vector borne diseases of zoonotic & contagious importance.
- a5- Summarize the principals of application of different quality management systems in Animal, Poultry and Environmental Hygiene practices.
- a6 Realize the general concepts and principles of veterinary epidemiology.
- A7 Realize the role of veterinarian in maintaining high level of public health and food safety

b- Intellectual skills:

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

- b1- Deal with , conceptualize and define research problems and questions
- b2- Interpret their own research data and develop new approach to solving their research questions
- b3- Adapt creative approaches to solving technical problems or issues associate with running and researches project.
- b 4- Compare , summarize and evaluate prior researches finding in a specific area
- b5- Adapt and evaluate knowledge related to Animal, Poultry and Environmental Hygiene and interpret it to solve the related problems.
- b6- Deal with the problems related to Animal, Poultry and Environmental Hygiene with the lack of some data.
- b7- Utilize the acquired knowledge about Animal, Poultry and Environmental Hygiene to solve the professional problems.
- b8- Utilize a research study and/or write a scientific paper related to the area of Animal hygiene and Environmental science.
- b9- Differentiate risk factors for each practice related to environmental pollution and disease occurrence

c- Professional and practical skills:

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

- C 1- Implement the principles of good experimental design and analysis to their own research project.
- C 2 Perform relevant statistical analysis on data obtained for their own research.
- C3- Implement different conventional and advanced techniques in the field of Animal, Poultry and Environmental Hygiene.

- C4- Write and evaluate reports related to environmental samples examination.
- C5- Write and evaluate reports related to epidemics (cause, risk factors, epidemiologic studies, diagnosis, outbreak investigation, control strategy)
- C6- Manage the principles of prevention and control of contagious and exotic diseases.
- C7- Manage different available tools and methods regarding to animal housing
- C8- Master different conventional and advanced methods in the field of disinfection of livestock and poultry farms with and without diseases.
- C9- Master different advanced techniques in the field of disposal of animal wastes.
- C10- Perform an integrated technique for control of external parasites.

d- General and transferable skills:

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

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

3- 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 .

4- Program Structure and Contents

A- Program duration: At least two academic years from the approval of registration by the Faculty Council and maximum four 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 year for researches and preparation of the Master Thesis.

B- Program structure: Hours/ week:

Basic course:-

4

3

7

11

Theoretical

Practical

Total

Subsidiary courses:-

Theoretical

4-8

Practical

6-8

Total

10-16

☒ **Master Thesis: completed during the second academic year.**

C- Program courses:

1- basic courses: master principle course and research methodology 13 hours / 36 week

Code	Course title	Hours /week		Academic year	Teaching duration
		theoretical	practical		
MPC-ANHG	Animal, poultry and environmental hygiene	3	4	Preliminary year	36 weeks

2-subsidiary courses: Select 3-5 courses depending on the thesis title from different master courses of the faculty theoretical: 5-6 hours, practical: 6-9 hours

Code	Course title	Hours /week		Academic year	Semester
		theoretical	practical		
M-187	Farm Animal Hygiene (Advanced Course)	2	2	Preliminary year	36 weeks
M-188	Poultry Hygiene (Advanced Course)	2	2		
M-189	Environmental Hygiene and Pollution	2	3		
M-190	Control of Epidemic Diseases	2	2		
M-191	Eradication of Rodent and Disease Vectors	2	2		
M-192	Insecticides and Public Health	2	2		
M-193	Hygiene of animal Enclosure	2	1		
M-194	Disinfectants and Disinfection	2	2		
M-195	Study of Occurrence and Spreading of diseases	2	-		

D- Courses contents

See master courses specification

5- Program Admission Requirements

a- According to the Faculty of Veterinary Medicine, Beni-Suef University By laws for Post Graduate Programs, applicants should have BVSc., from an Egyptian University or equivalent degree from any approved university, with at least general grade (Good) and (Very Good) in the specialized subject.

b- Also if the student has postgraduate diploma in one specialization of total (3 hours) at least with general grade (Good) and (Very good) in the specialized subject.

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

I- English language (Toefl or equivalent degree)

d- Admission to the program is open during March and September annually after at least one year from the B.V.Sc degree.

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 roles:

No. of course teaching hours/ week	Allowed time for written exam.	Degree	
		Theoretical	Practical and oral exam
≥ 3 hours	3 hours	50	50
≤ 3 hours	2 hours	25	25

- It is mandatory to pass all the courses each chance except biostatic (212)

-The passing mark in each exam is $\geq 60\%$.

-The faculty council has the right to deprive the applicant from entering the exams if his attendance courses is less than 75% .

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 Master 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.

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

7-Graduate student assessment

A: Assessment Tools

According to 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 according to University regulations.

1-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

2-Master Thesis:

All master-degree students should prepare a thesis in Animal, Poultry and Environmental hygiene. The department council must approve the protocol (plan) of the research. The thesis is supervised by one 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. The applicant should publish at least one scientific paper from the thesis in local or international journals

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	a1,3,4,5,6,7	b5,6,7,8,9	c1,4,5,7,8,9,10	d2,3
Practical exam	a2,6	b3,4	c3,8,9,10	d4.5
Oral exam	a1,3,4,5,6,7	b5,6,7,9	c6,7,8,9,10	d1,4

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
2. External Evaluators	Review program and courses Attending the final exam	Once before implementation annual report
3. College Quality Assurance committee	Annual program reviewer	

Course coordinator

Dr. Asmaa Nady

Head of the Department

Prof. Mohamed Ali

Master Program Specification Matrix (Program Courses with ILOS)

Program ILOs		courses
Knowledge and understanding	a1	M-187, M-189
	a2	MPC-ANHG
	a3	M-194
	a4	M-192,177
	a5	M-193, 44
	a6	M-195
	a7	M-189, 102, 111
Intellectual skills	b1	M-188, M-195, M-193 and thesis
	b2	M-190, M-191 and thesis
	b3	M-192
	b4	M-187, M-189
	b5	M-187, M-189
	b6	M-190
	b7	M-188, M-191, M-192, M-194 and thesis
	b8	M-189, M-190, M-195
	b9	M-191, M-192, M-193
Professional and practical skills	c1	M-190, M-195 and thesis
	c2	212 and thesis

	c3	M-188, M-192, M-194 and thesis
	c4	M-87, M-189, MPC-ANHG
	c5	M-190, M-194, M-195 and thesis
	c6	M-190, M-195
	c7	M-188, M-193 and thesis
	c8	M-194
	c9	M-189, M-190, MPC-ANHG
	c10	M-191, M-192, 91
General and transferable skills	d1	M-189, M-190, M-195
	d2	MPC-ANHG, M-187, M-88
	d3	MPC-ANHG, M-191
	d4	M-193, M-195
	d5	M-189, M-195
	d6	MPC-ANHG

Program aims – ILOS Matrix for the Master program (MVSC)

Program ILOs		Program aims							
		1	2	3	4	5	6	7	8
Program ILOS									
Knowledge and understanding	a1	√							
	a2				√				
	a3		√						
	a4			√		√			
	a5						√		
	a6							√	
	a7								√
Intellectual skills	b1	√							
	b2		√						
	b3			√					
	b4				√				
	b5.					√			
	b6						√		
	b7							√	
	b8								√
	b9								√
Practical and professional skills	c1								√
	c2					√			
	c3				√				
	c4								
	c5.			√					
	c6							√	
	c7	√							
	c8						√		
	c9			√					
	c10		√						
General and transferable skills	d1	√					√		
	d2								√
	d3		√						
	d4					√			
	d5				√				
	d6			√				√	

Master 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					
		a 1	a 2	a 3	a 4	a 5	a 6	a7	b 1	b 2	b 3	b 4	b 5	b 6	b 7	b 8	b 9	c1	c2	c3	c4	c 5	c6	c 7	c8	c 9	c10	d 1	d 2	d 3	d 4	d 5	d 6
Knowledge and understanding	a1	√					√																										
	a2					√																											
	a3			√			√																										
	a4		√					√																									
	a5				√			√																									
	a6			√																													
Intellectual skills	b1										√		√																				
	b2							√					√																				
	b3														√																		
	b4									√																							
	b5																√																
	b6										√					√																	
	b7								√						√																		
Professional and practical skills	c1																	√							√	√	√						
	c2																			√	√												
	c3																			√		√	√										
	c4																	√	√				√	√									
General and transferable skills	d1																										√	√	√				
	d2																														√		
	d3																											√					



Course specification of postgraduate

1-Basic information

Course Code:	MPC-ANHG
Course title :	Principle Master Course (Animal, Poultry and Environnemental Hygiène)
Program title:	Master degree in Animal, Poultry and Environnemental Hygiène
Contact hours/ week	7 hours/ week (Lect.3h./week; Pract.4h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

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

- Employ the acquired knowledge in animal hygiene and diseases control together with other related sciences in his/her professional practices.
- Show awareness of current problems and recent theories in the field of Animal, Poultry and Environnemental Hygiène.
- Identify the practical problems related to Animal, Poultry and Environnemental Hygiène and their solutions.
- Master different professional skills and techniques in the field of Animal, Poultry and Environnemental Hygiène.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- Comprehend the principals of environmental sanitation and diseases control
- Illustrate environmental pollutants (air, water, soil, feed, etc) and methods of prevention and control.
- Familiarize with the types and essentials for properly plan animal housing for different animal species and how it prevent diseases occurrence.
- Comprehend the principles of epidemiology, epidemiological triad and diagnosis and investigation of epidemic diseases.
- Familiarize with the sources and ways of spreading of contagious diseases and principles of their control
- Summarize the external parasites of veterinary importance, their harmful effect on animal health and rodent and most recent rodenticide used in the field.
- Realize the role of biosecurity regulation in diseases prevention and control at farms and nation levels
- Familiarize the different mechanisms of disinfectants and new products available in the field.



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Course specification of postgraduate

a.9 Summarize problems related to unhygienic disposal of animal wastes and finding untraditional methods to solve it.

a.10 Familiarize the regulations and rules used for importation of living cattle for breeding and calves for slaughter.

b- Intellectual skills

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

b1-Adapt a plan for environmental sanitation and food safety including (water, air and soil hygiene).

b2- Utilize biosecurity regulations for designing animal housing for prevention and control of diseases.

b3- Deal with the problems arising due to unhygienic disposal and treatment of animal wastes.

B4-Differentiate the measurable effect of environmental stressors on animal health, production and performance.

B5-Integrate a plan for prevention and control of contagious and emerging diseases

B6. Adapt the regulations and rules used for importation of living cattle for breeding and calves for slaughter and ways to develop it.

B7- interpret the preventive measures for external parasites in livestock operations and rodent control .

B8- Differentiate the different mechanisms of disinfectants and new products available in the field.

b.9 Correlate the principles of epidemiology and epidemiological triad to diagnose and investigate of epidemic diseases

c- Professional and practical skills

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

c1- Obtain experience in environmental sampling and examination and interpretation of results for environmental sanitation.

c2- Manage the problems arising due to unhygienic disposal and treatment of animal wastes from a new prospective.

c3- Implement recent techniques in reducing the effect of environmental stressors and climatic changes on animal health and production

c4- Preform designing and planning of animal houses according to biosecurity regulations and to prevent diseases occurrence

c5- Use the results of epidemiological study and investigation and applying on diseases prevention and control

c6- Advise for preventive measures to emerging and exotic diseases in animal populations.

c7- Master the efficacy of disinfectant and disinfection of animal premises after a disease occurrence

c8- Control of external parasite of veterinary importance in animal premises and rodent problem

c9- Write a report on the developing of the regulations used for importation of living cattle for breeding and calves for slaughter.

d- General and transferable skills



Course specification of postgraduate

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

- d1 Use different resources as library, scientific periodicals.
- d.2 Internet and scientific associations for getting knowledge.
- d.3 Communicate effectively with others.
- d.4 Work in multidisciplinary team.
- d.5 Prepare presentations, assay and illustrative posters.
- d.6 Apply the information technology for the improvement of occupational practices.
- d.7 Manage time effectively.

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect.3 h./week, Pract. 4h./week)	Air Hygiene	1-3	21	6	15
	Climatic changes and animal diseases (re-emerging)	4	3	3	-
	Water Hygiene	4-8	32	10	22
	Soil Hygiene	9-11	15	5	10
	Disposal and treatment of animal wastes (environmental concern, mortality disposal, manure management)	12-14	20	5	15
	Housing of animals (Horse, cattle, sheep ,poultry ,lab., animals)	15-16	10	10	-
	Animal housing –a form of preventive medicine	17-18	10	5	5
	Epidemiology(Etiology of disease, dynamics of disease occurrence)	19-23	30	15	15
	Control of contagious diseases(Def, Dynamics of infectious diseases)	24-26	15	15	-
	Quarantine regulations for imported animals(cattle for breeding, calves for slaughter)	24-29	16	10	6
	Biosecurity	30-31	12	12	-
	Measures of prevention and control of external parasites(Tick, lice, fleas)	30-33	27	12	15
	Disinfectants and Disinfection (classification of disinfectants and mode of action)	33-36	25	-	25
	Rodenticide and rodent control	33-34	8	-	8
	Case study	35-36	8	-	8
	Total	36	252	108	144



Course specification of postgraduate

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: Training visits: to quarantine, animals and poultry farms
- 5.5- Summer training course
- 5.6- Assays and reviews

6-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 ,2,3,4,5,6,7	b2,3,5,6,7,9	c3,5,6,8,9	d1,7
Practical Exam	a2,6,8,9	b3,7,8	c1,2,4,7,8	d6,7
Oral Exam	a1to10	b1to b9.	c1toc8	d1,3,7

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
written exams	During December
Oral Exam	During December

7.3. Weight of assessments

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

7- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:



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- A Manual Of Veterinary Hygiene Sir Frederick Smith (Author) Published By: General Books
 - Veterinary Epidemiology: An Introduction [Paperback] Dirk Pfeiffer Dirk Pfeiffer (Author)
› Visit Amazon's Dirk Pfeiffer Page
 - Water pollution (causes, effects and control) P.K Goel
 - Principles and practice of soil science R.E White, Blackwell Science (2001).
 - Farm animal Health and Disease control John K. Philadelphia 1982
 - Understanding Epidemiology, Mary E. Trrrence 2002.
 - Animal Health and Housing. "David Sainsbury", London, Bailliere, Tindal and Cassel 1997.
 - Animal Health and Housing. "David Sainsbury" Blackwell Science 2000.
 - Keeping livestock healthy, N Bruce Haynes (2001).
- Disinfection, Sterilization and preservation .Seymour S Block, Block Lea Febiger (1991)

8.3. Recommended texts

- Veterinary Epidemiology: An Introduction [Paperback] Dirk Pfeiffer Dirk Pfeiffer (Author)
› Visit Amazon's Dirk Pfeiffer Page

8.4. Journals, Websitesetc

1. Epidemiology and infection journal
2. Journal Toxicology and Environmental Health
3. Environmental managing
4. Environmental pollution

8.5 Websites:

1. www.educations.com
2. www.disinfectants1.com

Course Coordinators

Head of Department



Course specification

	Topics	Intended learning outcomes of course (ILOs)			
		K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
1	Air Hygiene	a1,2	b1	c1	d1,2,3
2	Climatic changes and animal diseases (re-emerging)	a1	b4	c3	d1,2
3	Water Hygiene	a1,2	b1	c1	d1,2,3
4	Soil Hygiene	a1,2	b1	c1	d1,2,3
5	Disposal and treatment of animal wastes	a9	b3	c2	d1,5
6	Housing of animals (Horse, cattle, sheep ,poultry ,lab., animals,	a3	b2	c4	d1,2,5
7	Animal housing –a form of preventive medicine	a3	b2	c4	d1,2,5
8	Epidemiology	a4	b9	c5	d1,2,5
9	Control of contagious diseases	a5	b5	c6	d1,2,3
10	Quarantine regulations for imported animals, & by-products	a10	b6	c9	d1,2,3,4
11	Biosecurity	a7	b2	c4	d1,2
12	Measures of prevention and control of external parasites	a6	b7	c8	d1,2
13	Disinfectants and Disinfection	a8	b8	c7	d1,2,7
14	Rodenticide and rodent control	a6	b7	c8	d3,7
15	Case study	-	-	-	d1,3,4



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Course specification of postgraduate

- b2. Investigate the hygienic problems in the farms to provide suitable means for control throughout biosecurity.
- b3. Interpret the environmental stressors in livestock farms and adaptation mechanism in animals.
- b4. Differentiate housing requirements for different animal species
- b5. Conduct epidemiologic study and outbreak investigation
- b6. Establishing a strategic plan for disease prevention, control, eradicate infectious diseases in addition to external parasites and rodent.
- b7. Solving a problem related to improper hygienic measure throughout disinfection.

c- Professional and practical skills

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

- c1. Collect different samples from animals and their surrounding environment.
- c2. Perform different techniques for disposal of animal wastes.
- c3. Graph models of housing for different animal species in addition to biosecurity levels.
- c4. Interpret field data and eradication strategy of epidemic diseases
- c5. Apply control programs for contagious and exotic diseases of animal population.
- c6. Control the problem of ectoparasites resistant to insecticides and of rodent.
- C7. Apply the control measures for mitigate the environmental stressors.

d- General and transferable skills

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

- d1. Use different resources as library, scientific periodicals,
- d2. Internet and scientific associations for getting knowledge.
- d3. Communicate effectively with others.
- d4. Work in multidisciplinary team.
- d5. Prepare presentations and illustrative posters.
- d6. Apply the information technology for the improvement of occupational practices.
- d7. Manage time effectively.

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
Course Title: Extension methods (Lect.2 h./week, Pract. 2h./week)	Environmental Hygiene (Air, Water& Soil)	1 st -7 th	28	12	16
	Hygienic disposal and treatment of animal wastes(mortalities, manure, biological, etc	8 th -10 th	14	8	6
	Climatic changes and animal health	11 th -12 th	6	6	-
	Biosecurity and livestock farms	12 th –	14	8	6



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	plan	15 th			
	Epidemiology (epidemiologic sequence, epidemic curve, eradication	15 th -21 th	24	14	10
	Principles of control of emerging and exotic diseases	21 th - 23 th	8	8	-
	Disinfection of livestock farms	24 th -28 th	22	8	14
	Control of external parasites	29 th -30 th	8	8	-
	Insecticides	31 th -33 th	12	-	12
	Rodent control	34 th	4	-	4
	Case studies	35 th -36 th	8	-	8
	Total	36	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 (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections: New techniques for collection of samples and applying the taken information under field conditions
- 5.4- Training visits: Training visits: to animals and poultry farms
- 5.5- Summer training course
- 5.6- Assays and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 to a9	b2,4,5,7	C2,c5,c6,c7.	d1,2,5
Practical Exam	a2.	b5,b9	C1,2,3,4,5,6,7.	d3,d4,d6,d7
Oral Exam	a1 to a9.	b2,4,5,7	C2,5,6,7	d1-d2,5

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
written exams	During December
Oral Exam	During December

7.3. Weight of assessments



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Assessment	Weight of assessment
Practical exams	25%
written exams	50%
Oral Exam	25%
Total	100

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)

Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:

Veterinary Epidemiology. Principals and Methods. Martin, S. W.; Meek, A. H. and Willeberg, P. (1987): Iowa State University Press, Ames.

Keller R. S. (2009): The complete textbook of animal health and welfare. 1st ed. Saunders el Sevier New york

Panda, H. (2001): Pesticides, insecticides, fungicides & herbicides. 1st ed. National Institute of Industrial. India

Prasad, J. (2002): Principles & Practices of Dairy Farm Management. 4th ed. Kalyani Publishers

Standard Methods for Examination of Water and Waste Water. A.P.H.A. (2005): Inc., Washington D.C., USA.

8.3. Journals, Websitesetc

- **Journals:** Journal of Animal Science
- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

www.educations.com.....

www.thepigsite.com/

www.disinfectants1.com

Course Coordinators

Dr. Asmaa Nady Mohammed

Head of Department

Prof. Mohamed Ali



Beni Suef University
Faculty of Veterinary Medicine

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	Environmental Hygiene (Air, Water & Soil)	1 st -7 th	a1	b1,2,4	c1	d1,2
2	Hygienic disposal and treatment of animal wastes (mortalities, manure, biological, etc	8 th -10 th	a2	b2	C2	d1
3	Climatic changes and animal health	11 th -12 th	a3	b3	C7	d1,2
4	Biosecurity and livestock farms plan	12 th – 15 th	a8	b2,7	C3	d5,6
5	Epidemiology (epidemiologic sequence, epidemic curve, eradication	15 th -21 th	a5,7	b5	C4,5	d3,4
6	Principles of control of emerging and exotic diseases	21th -23th	a5	b6	C5	d2
7	Disinfection of livestock farms	24 th -28 th	a7	b7	C5	d6
8	Control of external parasites	29 th -30 th	a6,8	b6	C6	d1
9	Disinfection	31 th -33 th	a7	b7	C5	d5,6
10	Insecticides	34 th	a8	b6	C6	d6
11	Rodent control	35 th -36 th	a8	b6	C6	d6
12	Student activities: Writing essays Internet search	During the course	a1,8	b1,2	C1	d1-d4



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

1-Basic information

Course Code:	M-188
Course title:	Poultry Hygiene (Advanced course)
Program title:	Master's degree in animal, Poultry & Environmental Hygiene
Contact hours/ week	4 hours/ week (Lect.2h./week; Pract.2h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to: Understand the academic and practical knowledge related to:

- 1- Environment stressors and its impact on poultry health and productivity.
- 2- Hygienic problems relating to the poultry environment.
- 3- Designing poultry farms in order of biosecurity and environmental needs.
- 4- Strategic plan for prevention and control of ectoparasites and highly contagious diseases.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Familiarize the main purposes and essential requirements for poultry housing.
- a2. Summarize systems for poultry housing in different climates
- a3. List the measurable effect of environmental stressors on poultry health.
- a4. Recognize hygienic disposal of animal mortalities.
- a5. Illustrate the principles of biosecurity measures for poultry farms.
- a6. Recognize methods of disinfection of poultry farms after disease outbreaks.
- a7. Comprehend the external parasites affecting broilers; contributing factors and methods of control including insecticides used and rodent control.
- a8. Summarize the consequences of poor hygiene in poultry farms.

b- Intellectual skills

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

- b1. Collect and analyze environmental samples from poultry buildings.
- b2. Investigate the hygienic problems in poultry farms to provide suitable means for



Course specification of postgraduate

control.

B3. Interpret the environmental stressors in livestock farms and adaptation mechanism in animals

b4. Analyze and solve problems related to poor house design.

b5. Evaluate biosecurity measures at farm and birds' levels.

b6. Interpret the measures applied for prevention and control of contagious diseases.

B7. Evaluate the efficacy of disinfection on poultry farms.

b8. Predict harmful effects of external parasites and rodent in poultry farms.

c- Professional and practical skills

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

c1. Measure and monitor the environmental problems in poultry farms.

c2. Planning and implement poultry farms in order of biosecurity measures.

c3. Demonstrate different methods for hygienic disposal and treatment of animal wastes

c4. Apply control program for prevention and control of contagious and exotic poultry diseases.

c5. Carry out disinfection for poultry farms routinely and after disease outbreaks.

c6. Plan a program for control of external parasites exists in poultry farms and stressors.

c7. Solve the problem of ectoparasites in poultry farms and Interpret methods of rodent control.

d- General and transferable skills

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

d1. Use different resources as library, scientific periodicals.

d2. Internet and scientific associations for getting knowledge.

d3. Communicate effectively with others.

d4. Work in multidisciplinary team.

d5. Prepare presentations and illustrative posters.

d6. Apply the information technology for the improvement of occupational practices.

d7. Manage time effectively.

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect.2 h./week, Pract. 2h./week)	Environmental hygiene (Air, water, soil, etc)	1 st -7 th	28	10	18
	Systems of poultry housing	8 th -9 th	8	8	-
	Monitoring problems in poultry farms, hatcheries, etc	10 th -12 th	12	-	12



Course specification of postgraduate

	Climatic changes and poultry diseases(GIS)	13 th -15 th	10	10	-
	Stress and poultry health (GAS)	15 th -17 th	8	8	-
	Hygienic disposal of poultry wastes	17 th -20 th	14	8	6
	Biosecurity (def., plan, components, etc	21 th -24 th	14	8	6
	Disinfection of poultry farms	24 th -29 th	24	10	14
	Control of external parasites	30 th -32 th	10	10	-
	Insecticides	33 th -35 th	12	-	12
	Rodent control	35 th -36 th	6	-	6
	Total	36	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 (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: Training visits: to poultry farms
- 5.5- Summer training course
- 5.6- Assays and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 to a7	b2,5,8.		d1,2
Practical Exam			c1 to c7	d3,d4
Oral Exam	a1 to a7.	b2,5,8.	c2,c6,c7	d2

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
Written exams	During December
Oral Exam	During December

7.3. Weight of assessments

Assessment	Weight of assessment
Practical exams	25
Written exams	50



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

Oral Exam	25
Total	100

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Recommended texts

-Keller R. S. (2009): The complete textbook of animal health and welfare. 1st ed. Saunders el
Sevier New york

-Panda, H. (2001): Pesticides, insecticides, fungicides & herbicides. 1st ed. National Institute
of Industrial. India

8.4. Journals, Websitesetc

- **Journals:** Journal of Animal Science
- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

www.educations.com.....
<http://www.vetmed.wisc.edu>
<http://www.WHO.int/en/>
<http://www.CDC.com/>
<http://www.OIE.com/>
<http://www.thepoultrysite.com>

Course Coordinators

Dr. Asmaa Nady Mohammed

Head of Department

Prof. Mohamed Ali



Beni Suef University
Faculty of Veterinary Medicine

Course specification

	Topics	Weeks	Intended learning outcomes of course (ILOs)			
			K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
1	Environmental hygiene (Air, water, soil, etc)	1 st -7 th	a1,8	b1	C1	d1,2
2	Systems of poultry housing	8 th -9 th	a1,2	b2	C2	d1
4	Monitoring problems in poultry farms, hatcheries, etc	10 th -12 th	a3	b3	C6	d2
5	Climatic changes and poultry diseases(GIS)	13 th -15 th	a4	b4	C2	d5,7
6	Stress and poultry health (GAS)	15 th -17 th	a5	b5	c2	d2,5
7	Hygienic disposal of poultry wastes	17 th -20 th	a6	b7	C5	d3,4
8	Biosecurity (def., plan, components, etc	21 th -24 th	a7	b8	C6,7	d1,4
9	Disinfection of poultry farms	24 th -29 th	a5,7	b4	C4	d1,6
10	Control of external parasites	30 th -32 th	a7	b7	C7	d4,6
11	Insecticides	33 th -35 th	a7	b7	C7	d3,4
12	Rodent Control	35 th -36 th	a7	b8	c7	d1-d4
13	Total	36 th				
14						
15						



Beni-Suef University
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Course specification of postgraduate

1-Basic information

Course Code:	M-189
Course title:	Environmental Hygiene and Pollution.
Program title:	Master's degree in Animal, Poultry & Environmental Hygiene
Contact hours/ week	5 hours/ week (Lect.2h./week; Pract.3h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

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

- 1- Understand the academic and practical knowledge related to identify impact and measurable effect of environmental pollution on the animal health.
- 2- Planning a program for environmental safety and sanitation.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Summarize environmental problems which affect livestock farms.
- a2. Comprehend the different types of animal wastes and its impact on animal health.
- a3. List different types of environmental stressors; its impacts on animal's immunity.
- a4. Realize correlation between emerging and re-emerging animal diseases and environmental pollution.
- a5. Identify types of epidemiologic studies.
- a7. Recall the role of disinfection, pest and rodent control in maintaining healthy environment
- a8. Summarize methods of prevention and control of environmental pollution.
- a9. Identify the tools of mitigate environmental pollutions.

b- Intellectual skills

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

- b1. Interpret and analyze different impurities which may be found in the environment.
- b2. Assess the impact of environmental pollution on animal health and productivity.
- b3. Apply different types of epidemiologic studies
- b4. Distinguish the role of disinfection in maintaining animal environment.
- b5. Utilize a novel method for control and treatment of environmental pollution and



Course specification of postgraduate

emerging diseases.

b6. Evaluate methods of disposal and treatment of animal wastes.

b8. Relate the extent of environmental pollution and pest and rodent infestation.

b9. Solve the problem of pest and rodent in livestock operations.

c- Professional and practical skills

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

c.1 Implement different methods for collection, analyzing environmental samples.

C2. Planning for the control of environmental problems in certain district or locality.

C3. Interpret the different methods of disposal of animal mortalities.

C4. Demonstrate the risk indicators of environmental pollution.

C5. Planning a program for environmental safety and sanitation

C6. Solving problems related to environmental pollution.

C7. Mater the most important environmental problems facing farmers Egyptian livestock and control techniques.

C8. Apply a control program for external parasites affecting animals

C9. Schedule a plan for control of rodents

d- General and transferable skills

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

d1. Use different resources as library, scientific periodicals, d2.internet and scientific associations for getting knowledge.

d3. Communicate effectively with others.

d4. Work in multidisciplinary team.

d5. Prepare presentations and illustrative posters.

d6. Apply the information technology for the improvement of occupational practices.

d7. Manage time effectively

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
Course Title: Extension methods (Lect.2 h./week, Pract. 3h./week)	Environmental Hygiene	1 st -5 th	21	10	21
	Livestock production; environmental pollution and climatic changes	5 th -7 th	12	12	-
	Emerging and Re-emerging diseases; Environmental pollution and	8 th -9 th	10	10	-
	Environmental pollution & food safety	10 th -11 th	6	6	-
	Hygienic disposal and treatment of	11 th -15 th	22	10	12



Course specification of postgraduate

	animal wastes (Rendering, Composting, etc)				
	Epidemiology (Study design, investigation diagnosis, Epidemiological studies etc) -	16 th -19 th	17	8	9
	Disinfection and disinfectant	19 th -23 th	23	8	15
	Pest and rodent control	24 th -27 th	17	8	9
	Monitoring problems in livestock farms	27 th -28 th	9	-	9
	Insecticides	29 th -31 th	15	-	15
	Case studies	32 th -35 th	18	-	18
	Student activity: Farm visits Writing essays Internet search	36 th	180	72	108

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: Training visits: to quarantine, animals and poultry farms
- 5.5- Summer training course
- 5.6- Assays and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 to a9	b2, b5.		d1,2
Practical Exam			c1,2,3,5,6,7,8,9,10	d3,d4,d5,d6
Oral Exam	a1 to a9.	b2,b5.	C4	d1,d2

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
written exams	During December
Oral Exam	During December

7.3. Weight of assessments



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)

Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

1. Disinfection in Veterinary and Farm Animal Practice. **Linton, A. H.; Hugo, W.**

8.2. Recommended texts

1. Pollution Science. **Pepper, I. L.; Gerba, C. P. and Prusse, M. L. (1996):**
Academic Press, Inc., California, USA.

8.3. Journals, Websitesetc

- **Journals:** Journal of Animal Science
- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

www.educations.com.....

www.thepigsite.com/

www.disinfectants1.com

Course Coordinators

Asmaa Nady Mohammed

Head of Department

Prof. Mohamed Ali



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	Environmental Hygiene	1 st -5 th	a1	b1	C1,4	d1,2
2	Livestock production; environmental pollution and climatic changes	5 th -7 th	a1,3	b1,2	C2	d2
3	Emerging and Re-emerging diseases; Environmental pollution and	8 th -9 th	a4	b5	C7	d1
4	Environmental pollution & food safety	10 th -11 th	a4,8	b5,6	C6	d5,7
5	Hygienic disposal and treatment of animal wastes (Rendering, Composting, etc)	11 th -15 th	a2	b5,6	C3	d3
6	Epidemiology (Study design, investigation diagnosis, Epidemiological studies etc) -	16 th -19 th	a5	b6	C4	d4,5
7	Disinfection and disinfectant	19 th -23 th	a7	b6	C5,6	d4,6
8	Pest and rodent control	24 th -27 th	a7	b1,3	C8,9	d1,2
9	Monitoring problems in livestock farms	27 th -28 th	a1	b5,6	C5	d3,4
10	Insecticides	29 th -31 th	a7	b5	C3,5	d3,4
11	Case studies	32 th -35 th	a6,8	b2,3,4	C4,8	d1-d4
	Student activity: Farm visits Writing essays - Internet search	36 th				



Course specification of postgraduate

1-Basic information

Course Code:	M-189
Course title:	Environmental Hygiene and Pollution.
Program title:	Master's degree in Animal, Poultry & Environmental Hygiene
Contact hours/ week	5 hours/ week (Lect.2h./week; Pract.3h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

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

- 1- Understand the academic and practical knowledge related to identify impact and measurable effect of environmental pollution on the animal health.
- 2- Planning a program for environmental safety and sanitation.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Summarize environmental problems which affect livestock farms.
- a2. Comprehend the different types of animal wastes and its impact on animal health.
- a3. List different types of environmental stressors; its impacts on animal's immunity.
- a4. Realize correlation between emerging and re-emerging animal diseases and environmental pollution.
- a5. Identify types of epidemiologic studies.
- a7. Recall the role of disinfection, pest and rodent control in maintaining healthy environment
- a8. Summarize methods of prevention and control of environmental pollution.
- a9. Identify the tools of mitigate environmental pollutions.

b- Intellectual skills

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

- b1. Interpret and analyze different impurities which may be found in the environment.
- b2. Assess the impact of environmental pollution on animal health and productivity.
- b3. Apply different types of epidemiologic studies
- b4. Distinguish the role of disinfection in maintaining animal environment.
- b5. Utilize a novel method for control and treatment of environmental pollution and



Course specification of postgraduate

emerging diseases.

b6. Evaluate methods of disposal and treatment of animal wastes.

b8. Relate the extent of environmental pollution and pest and rodent infestation.

b9. Solve the problem of pest and rodent in livestock operations.

c- Professional and practical skills

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

c.1 Implement different methods for collection, analyzing environmental samples.

C2. Planning for the control of environmental problems in certain district or locality.

C3. Interpret the different methods of disposal of animal mortalities.

C4. Demonstrate the risk indicators of environmental pollution.

C5. Planning a program for environmental safety and sanitation

C6. Solving problems related to environmental pollution.

C7. Mater the most important environmental problems facing farmers Egyptian livestock and control techniques.

C8. Apply a control program for external parasites affecting animals

C9. Schedule a plan for control of rodents

d- General and transferable skills

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

d1. Use different resources as library, scientific periodicals, d2.internet and scientific associations for getting knowledge.

d3. Communicate effectively with others.

d4. Work in multidisciplinary team.

d5. Prepare presentations and illustrative posters.

d6. Apply the information technology for the improvement of occupational practices.

d7. Manage time effectively

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
Course Title: Extension methods (Lect.2 h./week, Pract. 3h./week)	Environmental Hygiene	1 st -5 th	21	10	21
	Livestock production; environmental pollution and climatic changes	5 th -7 th	12	12	-
	Emerging and Re-emerging diseases; Environmental pollution and	8 th -9 th	10	10	-
	Environmental pollution & food safety	10 th -11 th	6	6	-
	Hygienic disposal and treatment of	11 th -15 th	22	10	12



Course specification of postgraduate

	animal wastes (Rendering, Composting, etc)				
	Epidemiology (Study design, investigation diagnosis, Epidemiological studies etc) -	16 th -19 th	17	8	9
	Disinfection and disinfectant	19 th -23 th	23	8	15
	Pest and rodent control	24 th -27 th	17	8	9
	Monitoring problems in livestock farms	27 th -28 th	9	-	9
	Insecticides	29 th -31 th	15	-	15
	Case studies	32 th -35 th	18	-	18
	Student activity: Farm visits Writing essays Internet search	36 th	180	72	108

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: Training visits: to quarantine, animals and poultry farms
- 5.5- Summer training course
- 5.6- Assays and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 to a9	b2, b5.		d1,2
Practical Exam			c1,2,3,5,6,7,8,9,10	d3,d4,d5,d6
Oral Exam	a1 to a9.	b2,b5.	C4	d1,d2

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
written exams	During December
Oral Exam	During December

7.3. Weight of assessments



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)

Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

1. Disinfection in Veterinary and Farm Animal Practice. **Linton, A. H.; Hugo, W.**

8.2. Recommended texts

1. Pollution Science. **Pepper, I. L.; Gerba, C. P. and Prusse, M. L. (1996):**
Academic Press, Inc., California, USA.

8.3. Journals, Websitesetc

- **Journals:** Journal of Animal Science
- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

www.educations.com.....

www.thepigsite.com/

www.disinfectants1.com

Course Coordinators

Asmaa Nady Mohammed

Head of Department

Prof. Mohamed Ali



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	Environmental Hygiene	1 st -5 th	a1	b1	C1,4	d1,2
2	Livestock production; environmental pollution and climatic changes	5 th -7 th	a1,3	b1,2	C2	d2
3	Emerging and Re-emerging diseases; Environmental pollution and	8 th -9 th	a4	b5	C7	d1
4	Environmental pollution & food safety	10 th -11 th	a4,8	b5,6	C6	d5,7
5	Hygienic disposal and treatment of animal wastes (Rendering, Composting, etc)	11 th -15 th	a2	b5,6	C3	d3
6	Epidemiology (Study design, investigation diagnosis, Epidemiological studies etc) -	16 th -19 th	a5	b6	C4	d4,5
7	Disinfection and disinfectant	19 th -23 th	a7	b6	C5,6	d4,6
8	Pest and rodent control	24 th -27 th	a7	b1,3	C8,9	d1,2
9	Monitoring problems in livestock farms	27 th -28 th	a1	b5,6	C5	d3,4
10	Insecticides	29 th -31 th	a7	b5	C3,5	d3,4
11	Case studies	32 th -35 th	a6,8	b2,3,4	C4,8	d1-d4
	Student activity: Farm visits Writing essays - Internet search	36 th				



Course specification of postgraduate

1-Basic information

Course Code:	M-190
Course title :	Control of epidemic diseases
Program title:	Master's degree in animal, Poultry & Environmental Hygiene
Contact hours/ week	4 hours/ week (Lect.2h./week; Pract.2h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

By the end of this course, the graduate should be able to understand

- 1- The academic and practical knowledge related to uses of epidemiology and different types of epidemiological studies.
- 2- Implement a biosecurity plan for emerging and exotic diseases. Recognize how to create an epidemic curve related to disease occurrence.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Outline the uses and different types of epidemiological studies.
- a2. Recognize How to create an epidemic curve.
- a3. Design and conduct specific experiment to test hypothesis about the efficacy of preventive measures (vaccine trials, biosecurity, etc).
- a4. Comprehend field epidemiological problems and control strategy in high risky population.
- a5. Summarize different types of epidemiological investigations of animal diseases.
- a6. Realize the role of disinfection process for preventive and control measures of epidemic diseases.
- a7. Recall the role of pest and rodent control in prevention and eradication of contagious diseases.
- a8. Identify the quarantine measures and principles of prevention and control of contagious and emerging diseases.
- a9. Describe the role of biosecurity measures in protection of human health through the safe Production of foods of animal origin, control of zoonotic disease and environmental stressors.

b- Intellectual skills

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



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Course specification of postgraduate

- b1. Predict the occurrence of diseases or other health problems
- b2. Interpret the collected data about disease.
- b3. Relate an increase of risk of diseases to macro and micro-climatic factors.
- b4. Categorize different livestock operations according to biosecurity regulations.
- b5. Assess different techniques adopted for diagnosis of diseases.
- b6. Design a plan for investigation of epidemic diseases and outbreaks
- b7. Revise methods of pest and rodent control in livestock operations.
- B8. Differentiate between quarantine measures for imported live animals, products and by-products.
- B9. Establish a program for prevention, control or eradication of epidemic diseases including disinfection process and methods of application.
- C10. Evaluate different methods for assessing the environmental role on occurrence of diseases

c- Professional and practical skills

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

- c1. Demonstrate scientific skills, including critical review of the scientific literature.
- c2. Use decision making skills to analyze animal health problems at farm and national level.
- C3. Implement an evaluation technique to programs of vaccination, isolation,
- C4. Solve health problems associated to climatic changes or increase stress level in the environment.
- C5. Solve the environmental problems arising due to unhygienic disposal of animal mortalities & wastes.
- C6. Manage and Re-operate livestock operations in orders of biosecurity regulations.
- C7. Apply disinfection for animal premises after an outbreak of contagious diseases
- C8. Solve problems of rodents and pest in livestock farms.
- C9. Implement a preventive and control measures in a locality and livestock operations.

d- General and transferable skills

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

- d1. Independent learning, taking responsibility for own studies.
- d2. Time management skills.
- d3. Organizational skills.
- d4. Becoming a reflective self-manager, by taking a systematic, analytical, strategic and reflective approach to study tasks.
- d5. Information gathering and analytical skills to make own judgments about ideas and knowledge.



Course specification of postgraduate

- d6. Language skills.
d6. Information technology skills.
d7. Understanding of own strengths and weaknesses, remaining optimistic by positive thinking in an isolated study situation.

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect.2 h./week, Pract. 2h./week)	Epidemiology (introduction, basics, etc)	1 st -5 th	20	14	6
	Diseases (definitions, sources, transmission, maintenance ,chain, etc)	6 th -7 th	6	6	-
	Stress and animal health	7 th -9 th	8	8	-
	Diseases (occurrence, measuring and diagnosis)	9 th -10 th	4	4	-
	Investigation of epidemic diseases	10 th -12 th	10	4	6
	Biosecurity in livestock farms (uses, principles, levels, components and risk analysis scheme.	13 th -15 th	12	6	6
	Principles of prevention and control of contagious, emerging, exotic diseases, etc	16 th -19 th	16	16	-
	Quarantine measures for imported live animals, products and by-products	20 th	4	4	-
	Methods of prevention and control of pest and rodent in livestock operations	21 th -24 th	16	10	6
	Surveillance system & its application in risk analysis	25 th -26 th	6	-	6
	Study design	26 th -27 th	6	-	6
	Disinfectants and disinfection	28 th -31 th	15	-	15
	Insecticides	31 th -34 th	13	-	13
	Cases study (application of epidemiologic study	35 th -36 th	8	-	8
	Total	36	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 (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: Training visits: to quarantine, animals and poultry farms
- 5.5- Summer training course



Course specification of postgraduate

5.6- Assays and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
written Exam	a1 to a9.	b4, b5—b6- b7-b8-b9.		d1,d2
Practical Exam			c1 to c7.	d3,d4,d5,d7
Oral Exam	a1 to a9.	b4, b5—b6- b7-b8-b9.	c1-c2-c4- c5-c8.	d1-d3

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
written exams	During December
Oral Exam	During December

7.3. Weight of assessments

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene (Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)

Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:

- A University Press, London.
- Farm Animal Health. A practical Guides. Cullen, P.T. (1991): 1st Ed.
- Pollution in Livestock Production Systems. Dewi, A.P.; Axford, R. F. E.; Marai, I. F. M. and Omed, H. (1994): CAB International. Wallingford, UK.



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Course specification of postgraduate

8.3. Recommended texts

1. Pollution Science. Pepper, I. L.; Gerba, C. P. and Prussea, M. L. (1996): Academic Press, Inc., California, and USA.
2. Principals of Cattle Production. Philips, C. J. C. (2001): CABI Publishing, Wallingford, UK.

8.4. Journals, Websitesetc

- **Journals:** Journal of Animal Science
- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

www.educations.com.....

www.thepigsite.com/

www.disinfectants1.com

www.rvc.ac.uk

Course Coordinators

Asmaa Nady Mohammed

Head of Department

Prof. Mohammed Ali



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	Epidemiology (introduction, basics,etc)	1 st -5 th	a1,2	b1,2,3	C1,2	d1,5
2	Diseases (definitions, sources, transmission, maintenance, chain, etc)	6 th -7 th	a7	b3	C3	d3,6
3	Stress and animal health	7 th -9 th	a9	b10	C4,5	d4
4	Diseases (occurrence, measuring and diagnosis)	9 th -10 th	a3,6,8	B5,6	C3	d1,3
5	Investigation of epidemic diseases	10 th -12 th	a5,8	b5,6	C1,2	d1
6	Biosecurity in livestock farms (uses, principles, levels, components and risk analysis scheme	13 th -15 th	a8	b4	C6	d2
7	Principles of prevention and control of contagious, emerging, exotic diseases, etc	16 th -19 th	a9	b9	C9	d5
8	Quarantine measures for imported live animals, products and by-products	20 th	a8	b8	C7,8	d1
9	Methods of prevention and control of pest and rodent in livestock operations	21 th -24 th	a7	b7	C9	d2,6
10	Surveillance system & its application in risk analysis	25 th -26 th	a4	b9	C1	d1,2
11	Study design	26 th -27 th	a3	b1	C1	d2
13	Disinfectants and disinfection	28 th -31 th	a6	b9	C7	d2
14	Insecticides	31 th -34 th	a7	b7	C8	d3
15	Cases study (application of epidemiologic study	35 th -36 th				d1-d4



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Course specification of postgraduate

1-Basic information

Course Code:	M-191
Course title :	Eradication of Rodents and disease Vectors
Program title:	Master degree in Animal, Poultry & Environmental Hygiene
Contact hours/ week	4 hours/ week (Lect.2h./week; Pract.2h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

- 1- Acquire knowledge about the serious effects of rodents on animal health and production.
- 2- Identify the aim of deratization.
- 3- Explain new methods of rodent control.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Comprehend the economic impacts of rodent infestation of livestock farms.
- a2. Realize the role of sanitation and cleanliness in the control of rodents.
- a3. Familiarize with different types of bait available for control of rodents.
- a4. Illustrate the meaning of biological control of rodents.



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Course specification of postgraduate

- a5. Describe trapping as a mean for rodent control and mechanism of action.
- a6. Summarize variable recommendations to prevent re-infestation of animal premises with rodent.
- a7. Illustrate the components of IPM strategy and how to measure its effectiveness.

b- Intellectual skills

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

- b1. Utilize recent techniques to deal with any problem related to rodents in animal enclosures.
- b2. Interpret the effect of hygienic measures and sanitation inside the farm in the control of rodents.
- b3. Compare between different measure used for control of rodents as biological control, trapping and baiting.
- b4. Correlate the recommendations used to prevent re-infestation of animal enclosures.
- b5. Adapt a program for combating rodents inside animal houses using IPM strategy.

c- Professional and practical skills

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

- C1. Use biological enemies of rodents in their control for as a friendly mean for the environment.
- c2. Write a report on the economic implications of rodent infestation in animal enclosures.
- C3. Perform hygienic measures and a sanitation program to control different disease vectors.
- c4. Implementation of trapping, types how to use and appropriate placing and timing.
- c5. Master the different baits used for rodent control and the ideal rodenticide.
- c6. Advice different recommendations to prevent re-infestation.
- c7. Use IPM program as the best method to prevent re-infestation and maintain safety.

d- General and transferable skills

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

- d1. Communicate effectively with public, colleagues and appropriate authority.
- d2. Work effectively as a member of a team in delivering the services to community.
- d3. Utilize communicating skills and have access to the internet and retrieve the information.
- d4. Be committed to ongoing learning and self-evaluation.
- d5. Increase student ability of creative thinking.
- d6. Deal with computer and software program.



Course specification of postgraduate

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures	Practical
(Lect.2 h./week, Pract. 2h./week)	Course description	1	2	2	-
	Economic problems caused by rodents	1-5	14	8	6
	Rodent control(Sanitation)	5-10	20	10	10
	Biological control	10-14	18	8	10
	Trapping	14-20	26	14	12
	Baiting	21-26	24	12	12
	Recommendations for rodent control	27--31	18	10	8
	IPM as alternative technique to control rodents	31-35	14	8	6
	Student activity	33-36	8	-	8
	Total	36 weeks	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 (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Summer training course
- 5.6- Assays, presentations and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1,2,3,4,6,7	b1,2,4,5	c1to c7	d3,5
Practical Exam	a2,3,4,5,6,7	b3,4,5	c3,4,5,7	d2,5
Oral Exam	a1,2,3,4,6,7	b1,2,3,4,6,7	c1,3,4,5,6,7	d1,5

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
Written exams	During December
Oral Exam	During December



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Course specification of postgraduate

7.3. Weight of assessments

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)
Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:

- Rodent pests and their control, Buckle, A. P., Smith, R. H., CAB International (2006)
- Rodent Control: A Practical Guide for Pest Management Professionals, Robert Corrigan, Dan Moreland GIE Inc., (2001).

8.3. Journals, Websitesetc

Websites:

- <http://www.vetmed.wisc.edu>
- <http://www.WHO.int/en/>
- <http://www.CDC.com/>

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

Course Coordinators

Head of Department



Beni-Suef University
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Course specification of postgraduate



Beni Suef University
Faculty of Veterinary Medicine

Course specification

	Topics	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	Course description	-	-	-	d1,4
2	Economic problems caused by rodents	a1	b1	C2	d2,3
3	Rodent control(Sanitation)	a2	b2	C3	d3,4
4	Biological control	a4	b3	C1	d3,4
5	Trapping	a5	b3	C4	d4,5
6	2nd semester				
7	Recommendations for rodent control	a6	b4	C6	d6
8	IPM as alternative technique to control rodents	a7	b5	C7	d3,5
9	Baiting	a8	b2	C1	d3,5
10	Student activity	-	-	-	d2



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Course specification of postgraduate

1-Basic information

Course Code:	M-192
Course title :	Insecticides and public health.
Program title:	Master degree in Animal, Poultry and Environmental Hygiene
Contact hours/ week	4 hours/ week (Lect.2h./week; Pract.2h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

- 1- Animal pests, their impacts and control methods (including the principles these are based on, and the task specifications DOC has developed).
- 2- Provides comprehensive information about classification and properties of insecticides.
- 3- Clear information about insecticides, effects on non-target organism's environmental problems: biological magnification, persistence

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Familiarize with risk analysis of external parasitism in animal livestock farms
- a2. Comprehend the relation between different types of pests of veterinary importance and emerging of diseases.
- a3. Illustrate general measures for prevention and control of external parasites.
- a4. Summarize IPM strategy as an alternative measure for control of flies in livestock farms.
- a5. Realize the hygienic methods for disposal of pesticide residues.
- a6. Realize a new method for monitoring pest inside livestock farms.
- a7. Comprehend uses of GPS in prediction and control of attacks of external parasites of veterinary importance.

b- Intellectual skills

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

- b1. Interpret data of risk analysis of external parasitism and using them to control this problem.
- b2. Adapt a method to connect the prevalence of external parasites of veterinary importance and the emergence of some diseases.
- b3. Utilize IPM strategy in control of flies in animal houses and general hygienic measures for all kinds of parasites.
- b4. Deal with the residues of pesticides and dispose them hygienically.
- b5. Utilize different methods to monitor pests inside animal houses.



Course specification of postgraduate

b6. Interpret the use of GPS for predicting and controlling pests. .

c- Professional and practical skills

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

- c1. Master the risk analysis for external parasites of veterinary importance.
- c2. Write a report on pests and the emergence of diseases..
- C3. Manage the general measures for prevention and control of external parasites.
- c4. Advice IPM strategy as the best technique to control external parasites in animal enclosures.
- c5. Implement the hygienic measures for disposal of pesticide waste friendly to the environment.
- c6. Use new measures for monitoring pests in livestock farms.
- c7. Advice using GPS as a recent technique for predicting and controlling external parasites.

d- General and transferable skills

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

- d1. Communicate effectively with public, colleagues and appropriate authority.
- d2 .Work effectively as a member of a team in delivering the services to community.
- d3. Utilize communicating skills and have access to the internet and retrieve the information.
- d4. Be committed to ongoing learning and self-evaluation.
- d5. Increase student ability of creative thinking.
- d6. Deal with computer and software programs
- d7. Utilize new technological tools.
- d8. Written essays on the current veterinary hygienic problems each term.

4-Topics and contents

Course	Topic	Week	No. of hours	Lectures	Practical
(Lect.2 h/week, Pract. 2h/week)	Course discription	1	2	2	-
	Risk analysis of external parasitism	1-8	24	14	10
	Pests and emerging diseases	6-14	18	12	6
	General measures for prevention and control of external parasites in livestock operation	9-22	26	16	10
	IPM as alternative technique to control flies problem	14-28	26	12	14
	GPS for pest prediction & control	29-32	8	8	-
	Hygienic disposal of pesticides residues, containers, package, etc	21-36	18	8	10
	Monitoring pests in livestock operations (sampling, counting & identification	26-31	12	-	12
	Case studies	32-36	10	-	10



Course specification of postgraduate

	Total	36	144	72	72
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5-Teaching and learning method

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Summer training course
- 5.5- Assays, presentations and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1,2,3,4,5,7	b1,2,3,4,6	c1,2,3,4,5,7	d3,5,8
Practical Exam	a3,4,5,6.	b1,3,4,5	c1,3,4,5,6	d2,7
Oral Exam	a1,2,3,4,5,7	b1,2,3,4,6	c1,3,4,5,7	d1,5

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
Written exams	During December
Oral Exam	During December

7.3. Weight of assessments

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)

Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

8.2. Essential books:

1. The Economic Importance of Insects, Dennis S. Hill, Springer; 1st edition (1996).
2. Handbook of Biological Control: Principles and Applications of Biological Control, T. W. Fisher Thomas S. Bellows , L. E. Caltagirone , D. L. Dahlsten, Carl B. Huffaker , G. Gordh , Academic Press; 1st edition (1999)

8.3. Journals, Websitesetc

Journals:

- Journal Toxicology and Environmental Health
- J. Environmental monitoring and assessment
- Environmental pollution

Websites:

- www.Vet.cornell.edu/
 - www.Vetmed.ufl.edu/
 - www.Vetmed.ucdavis.edu/
 - www.Vetmed.auburn.edu/
 - www.Oie.int/
 - www.fao.org/
 - www.defra.gov.uk
 - www.emro.who.int/
 - www.efsa.eu.int/
- www.cabi-publishing.org

Course Coordinators

Head of Department



Beni Suef University
Faculty of Veterinary Medicine

Course specification

	Topics	Intended learning outcomes of course (ILOs)			
	1st semester	K and U (a)	I.S (b)	P. P.S. (c)	G.T.S (d)
1	Course discription	-	-	-	d1,4
2	Risk analysis of external parasitism	a1	b1	c1	d5
3	Pests and emerging diseases	a2	b2	c2	d1,3
4	General measures for prevention and control of external parasites in livestock operation	a3	b3	c3	d1,3
5	IPM as alternative technique to control flies problem	a4	b3	c4	d5,6
	2nd semester				
6	GPS for pest prediction & control	a7	b6	c7	d7
7	Hygienic disposal of pesticides residues, containers, package, etc	a5	b4	c5	d5,7
8	Monitoring pests in livestock operations (sampling, counting & identification	a6	b5	c6	d5
9	Case studies	-	-	-	d1,2,3



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Course specification of postgraduate

1-Basic information

Course Code:	M-193
Course title :	Hygiene of Animal Enclosures.
Program title:	Master degree in Animal, Poultry & Environmental Hygiene
Contact hours/ week	3 hours/ week (Lect.2h./week; Pract.1h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

- 1- Identify different systems of animal housing according to their age and production.
- 2- Acquire knowledge about system of housing as a form of preventive medicine.
- 3- Acquire knowledge about role of biosecurity in designing animal house.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Familiarize with general purpose of animal housing, essentials and future expansion.
- a2. Illustrate different systems of housing of farm animals.
- a3. Realize how to set a biosecurity program to keep animal houses safe.
- a4. Recognize design and implementation of animal houses.
- a5. Comprehend animal housing as a form of preventive medicine.
- a6. Summarize techniques used to manage and dispose of wastes inside animal houses.
- a7. Understand the importance of having a disinfection program to the house before entering a new herd and how to prepare the building for it.

b- Intellectual skills

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

- b1. Compare different types of housing systems of animals based on the type of production and age.
- b2. Correlate the aim purpose and essentials of animal housing and future expansion to keeping animal health and improving their performance.
- b3. Deal with the hazards wastes that present inside the farm in environmentally friendly ways.
- b4. Interpret the role of preparing the animal house before disinfection in the efficiency.
- b5. Adapt the designing of animal house to maintain animal health and performance.



Course specification of postgraduate

b6. Utilize a biosecurity program to design animal housing.

c- Professional and practical skills

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

- c1. Perform a biosecurity program to design animal houses.
- c2. Manage new methods to dispose hazards wastes to keep the environment surrounding the animal hygienic to maintain their health and performance.
- c3. Use disinfection program depending on new and efficient disinfectants.
- c4. Implement designing of animal housing as a form of preventive medicine.
- c5. Master the different systems of animal housing of different species.
- c6. Employ general purpose of the houses and essentials to properly design them.

d- General and transferable skills

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

- d1. Communicate effectively with public, colleagues and appropriate authority.
- d2. Work effectively as a member of a team in delivering the services to community.
- d3. Utilize communicating skills and have access to the internet and retrieve the information.
- d4. Be committed to ongoing learning and self-evaluation.
- d5. Increase student ability of creative thinking.
- d6. Deal with computer and software program

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect. 2 h./week, Pract. 1h./week)	Course description	1	2	2	-
	Biosecurity (major components of biosecurity and developing of biosecurity program)	2-5	8	8	-
	Animal housing (general purposes, disposal of animal excreta, expansion)	1-12	24	14	10
	Systems of animal housing (horse, dairy cattle, calves, poultry)	13-21	18	18	-
	Designing & implementation of animal house	22-24	6	6	-
	Disinfection (purpose of cleaning and disinfection, preparation of the house, choosing the disinfectant, etc.)	11-30	24	12	12
	Farm hygiene and animal health	31-34	8	8	-



Course specification of postgraduate

	Managing hazardous wastes (mortalities, manure, pesticide & vaccine containers, biological agents, etc	23-36	10	4	6
	Student activities	29-36	8	-	8
	Total	36	108	72	36

5-Teaching and learning methods

- 5.1- Lectures (brain storm, discussion) using board, data shows
- 5.2- Self learning by preparing essays and presentations (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: animals and poultry farms
- 5.5- Summer training course
- 5.6- Assays, presentations and reviews

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1 to a7	b1 to b6	c1,2,3,4,5	d3,6
Practical Exam	a1,6,7	b2,3,4	c2,3,6	d2,5
Oral Exam	a1 to a7	b1 to b6	c1,2,3,4,5	d1,5

7.2. Assessment schedules

Method	Week(s)
Practical exams	45
Written exams	45-48
Oral Exam	45-48

7.3. Weight of assessments

Assessment	Weight of assessment
Practical exams	30
Written exams	50
Oral Exam	20
total	100

8- List of references



Beni-Suef University
Faculty of Veterinary Medicine

Course specification of postgraduate

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)
Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:

- Horse Housing: How to Plan, Build, and Remodel Barns and Sheds, Richard Klimesh , Cherry Hill, Trafalgar Square Books (2002)
- Farm Animal Housing and Welfare (Current Topics in Veterinary Medicine), S.H. Baxter, M.R. Baxter, and J.A.C. MacCormack, Springer, (1983).
- Housing of Animals by A. Maton, J. Daelemans, and J. Lambrecht Elsevier Publishing Company (1985)

8.3. Journals, Websitesetc

Journals:

- Journal of Animal Science

Websites:

- <http://www.vetmed.wisc.edu>
- www.educations.com
- www.thepigsite.com/
- www.disinfectants1.com

Course Coordinators

Head of Department



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	Course description	1	-	-	-	d3,4
2	Biosecurity (major components of biosecurity and developing of biosecurity program)	2-13	a3	b6	c1	d3
3	Animal housing (general purposes, disposal of animal excreta, expansion)	14-16	a1	b2	c6	d3,6
4	Systems of animal housing (horse, dairy cattle, calves, poultry)	17-22	a2	b1	c5,6	d6
	2nd Semester					
5	Designing & implementation of animal house	23-26	a4	b5,6	c4	d5
6	Disinfection (purpose of cleaning and disinfection, preparation of the house, choosing the disinfectant, etc.)	27-30	a7	b4	C3	d2,3
7	Farm hygiene and animal health	31-33	a5	b2	c2,4	d4,5
8	Managing hazardous wastes (mortalities, manure, pesticide & vaccine containers, biological	34-35	a6	b3,5	c2	d3,6



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	agents, etc					
9	Student activities	36	-	-	-	d1,2



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Course specification of postgraduate

1-Basic information

Course Code:	M-194
Course title :	Disinfectants and disinfection
Program title:	Master Degree in Animal, Poultry & Environmental Hygiene
Contact hours/ week	4 hours/ week (Lect.2h./week; Pract.2h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

- 1- Values the role of disinfection and decontamination in reducing the risks of communicable and emerging diseases.
- 2- . Recognize the consequence of poor cleaning and disinfection.

3- Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

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

- a1. Illustrate the steps of disinfection process in case of highly contagious diseases.
- a2. Realize different definitions concerning disinfectants and disinfection.
- a3. Summarize the purposes of disinfection process and how to set a disinfection program.
- a4. Understand mode of action of different disinfectants.
- a5. Realize the steps of disinfection of egg incubators and hatcheries.
- a6. Illustrate new techniques to evaluate the efficiency of disinfectants.

b- Intellectual skills

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

- b1. Deal with highly contagious diseases through effective disinfection program.
- b2. Utilize classification of disinfectants to choose the most appropriate one.
- b3. Adapt a routine disinfection program for animal enclosures.
- b4. Differentiate between disinfectants using their mode of action.
- b5. Utilize a program for disinfection of egg incubators and hatcheries.
- b6. Interpret the different methods for evaluation of disinfectants.

c- Professional and practical skills

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

- c1. Write a report on the disinfection after highly infectious diseases.
- c2. Obtain information about classification and definitions of disinfectants.
- c3. Manage a routine program of disinfection and another program after outbreaks of diseases.
- c4. Master factors influencing the efficacy of disinfectants.
- c5Advice the best disinfectants available for disinfection of egg incubators and hatcheries.
- c6. Implement new techniques for the evaluation of disinfectants found in the field.



Course specification of postgraduate

d- General and transferable skills

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

- d1. Communicate effectively with public, colleagues and appropriate authority.
- d2. Work effectively as a member of a team in delivering the services to community.
- d3. Utilize communicating skills and have access to the internet and retrieve the information.
- d4. Be committed to ongoing learning and self-evaluation.
- d5. Increase student ability of creative thinking.
- d6. Deal with computer and software programs

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect.2 h./week, Pract. 2h./week)	Course description	1	2	2	-
	Disinfection of highly contagious diseases	1-8	26	14	12
	Disinfection (Def., classification of disinfectants)	7-18	42	20	22
	Disinfection (general purpose, program of disinfection	18-24	20	12	8
	Disinfection (mode of action, factors affecting its efficiency)	22-31	30	14	16
	Disinfection of hatcheries and egg incubators	32-36	10	10	-
	Evaluation of the efficiency of disinfectants)	30-34	10	-	10
	Students activities	35-36	4	-	4
	Total	36	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 (Electronic learning, Seminars, scientific search on related websites, international, national and local journals, related books in faculty library).
- 5.3- Practical sections
- 5.4- Training visits: animals and poultry farms egg incubators and hatcheries
- 5.5- Summer training course
- 5.6- Assays, presentations and reviews



Course specification of postgraduate

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	I.S	P&P.S	G.S
Written Exam	a1,2,3,4,5	b1,2,3,4,5	c1,2,3,4,5	d3,6
Practical Exam	a1,2,3,4, 6	b1,2,3,4,6	c1,2,3,4,6	d2,5
Oral Exam	a1,2,3,4,5	b1,2,3,4,5	c1,2,3,4,5	d1,5

7.2. Assessment schedules

Method	Week(s)
Practical exams	During December
Written exams	During December
Oral Exam	During December

7.3. Weight of assessments

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

8- List of references

8.1. Notes and books

Departmental notes on:

- Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)
Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

8.2. Essential books:

- Disinfection in Veterinary and Farm Animal Practice, Linton, WileyBlackwell (1987)

8.3. Recommended texts

- Effective cleaning and disinfection by Richard F. Bristol, (United States Department of Agriculture. Veterinary Services, 1988).
- Guidelines on disinfection in animal husbandry for prevention and control of zoonotic diseases by (World Health Organization, 1984)

8.4. Journals, Websitesetc

- Environmental pollution

Websites:



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Course specification of postgraduate

- <http://www.vetmed.wisc.edu>
- <http://www.WHO.int/en/>
- <http://www.CDC.com/>
- <http://www.OIE.com>

Course Coordinators

Head of Department



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Course specification

	Topics	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	Course description	-	-	-	d3,4
2	Disinfection of highly contagious diseases	a1	b1	c1	d2
3	Disinfection (Def., classification of disinfectants)	a2	b2	c2	d3
4	Disinfection (general purpose, program of disinfection	a3	b3	c3	d4,5
	2nd semester				
5	Disinfection (mode of action, factors affecting its efficiency)	a4	b4	c4	d6
6	Disinfection of hatcheries and egg incubators	a5	b5	c5	d1,2
7	Evaluation of the efficiency of disinfectants)	a6	b6	c6	d4
8	Students activities	-	-	-	d1,2



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Course specification of postgraduate

1-Basic information

Course Code:	M-195
Course title :	Study of occurrence and spreading of diseases
Program title:	Master degree in Animal, Poultry and Environmental Hygiene
Contact hours/ week	2 hours/ week (Lect.2h./week; Pract.0h./weeks)
Approval Date	

2-Professional information

Overall aims of course:

This course aims to:

- 1- To produce highly motivated and adaptable Master students for screening and diagnosis of contagious diseases, with a desire for continuing education in field of prediction and prevention of health problems in veterinary practice.

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 Familiarize with infectious, non-infectious, contagious, emerging, exotic, reportable diseases, etc.
- a.2 Comprehend how diseases arises, spread and strategy of maintenance within the host and in environment.
- a.3 Illustrate stages of diseases and how to make an epidemiological study to diagnose and control such diseases.
- a.4 Realize methods of disinfection of livestock farms after outbreaks of emerging or contagious diseases.
- a.5 Summarize the principles of prevention and control of noninfectious communicable diseases.
- a.6 Illustrate a new approach for prevention and control of external parasites of veterinary importance.
- a.7 Summarize different patterns of disease occurrence.
- a.8 Realize the role of stress in the incidence of infectious and noninfectious diseases.

b- Intellectual skills

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



Course specification of postgraduate

- b.1 Adapt a study for investigating of epidemic diseases.
- b.2 Interpret data about disease (cause, source, transmission , occurrence , measuring , etc)
- b.3 Correlate an increased risk of emerging diseases outbreak to host, agent and environmental determinants.
- b.4 Interpret the role of vectors of external parasites in spreading of diseases.
- b.5 Utilize a program for disinfection of animal premises after outbreak of infectious and noninfectious diseases.
- b.6 Interpret an epidemiological curves of infectious and noninfectious diseases.
- b.7 Correlate the role of stress in the incidence of infectious and noninfectious diseases
- b.8 Utilize a program for prevention , control or eradication of epidemic diseases

c- Professional and Practical Skills:

- .c.1 Master the potential risk factors related to the environment and lead to incidence of diseases.
- c.2 Advice of the use of disinfectant properly for different purposes.
- c.3 Master a program for control of vector borne diseases
- c.4 Implement biosecurity program for the control of noninfectious communicable diseases. measures at all levels (Farm, locality, governorate and country).
- c.5 Manage a plan for mitigation and adaptation to different stressors in livestock farms.
- c.6 Implement more the one epidemiological study to investigate disease outbreak.
- c.7 Implement the validity of screening and diagnostic tests for epidemic and emerging diseases.
- c.8 use the data about disease (cause, source, transmission , occurrence , measuring , etc) to access control of them.

d- General and transferable skills

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

- d.1 Use different resources as library, scientific periodicals,
- d.2 internet and scientific associations for getting knowledge.
- d.3 Communicate effectively with others.
- d.4 Work in multidisciplinary team.
- d.5 Prepare presentations and illustrative posters.
- d.6 Apply the information technology for the improvement of occupational practices.
- d.7 Manage time effectively.



Course specification of postgraduate

4-Topics and contents

Course	Topic	Weeks	No. of hours	Lectures	Practical
(Lect.2 h./week, Pract. 0h./week)	Environment and diseases (emerging, exotic, noninfectious, communicable)	1	8	8	-
	Principles of prevention and control of noninfectious communicable diseases	2-6	14	14	-
	Epidemiological study(design, interpretation) outbreak investigation	7-10	8	8	-
	Disinfection and disinfectant	11-16	8	8	-
	Control of external parasites of veterinary importance	17-20	8	8	-
	Stress and disease	21-25	8	8	-
	Diseases (def., sources, transmission, ice-berg, epidemiological triad)	26-32	10	10	-
	Diseases(occurrence, pattern and frequency, epidemic curve)	33-36	8	8	-
	Total	36	72	72	-

5-Teaching and learning methods

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

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

5.3. **Summer training course**

5.4. **Assays and reviews**

5.5. **Discussion groups**

7-Student assessment

7.1. Assessments methods:

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U	LS	P&P.S	G.S
Written Exam	a1 to a8	b2, 3,4,6,7	c1to c8	d1,7
Practical Exam	-	-	-	-
Oral Exam	a1 to a8	b2,3,4,6,7	c1to c8	d1,3,7



Course specification of postgraduate

7.2. Assessment schedules

Method	Week(s)
Practical exams	-
Written exams	During December
Oral Exam	During December

7.3. Weight of assessments

Assessment	Weight of assessment
Practical exams	-
Written exams	70
Oral Exam	30
total	100

8- List of references

8.1. Notes and books

Departmental notes on:

Text book of Animal, Poultry and Environmental Hygiene(Parts I & II) Professor/
Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Practical notes on Animal, Poultry and Environmental Hygiene (Parts I & II)
Professor/ Mohammed Abdel Rahman Elbably and Dr/ Asmaa Nady Mohammed

Websites:

www.educations.com.....

www.thepigsite.com/

www.disinfectants1.com

www.rvc.ac.uk

Course Coordinators

Head of Department



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Course specification of postgraduate



Course specification

	Topics	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	Disease(def., types, sources , transmission, stages, ice-berg, epidemiologic triad,etc	a2	b2	c 8	d2
2	Environment and diseases(emerging, exotic, non-infectious,	a1	b3	c1	d1,2,6
3	Stress and disease (Physiological aspects)	a8	b7	c5	d5
4	Disease occurrence (pattern, frequency) , epidemic curve	a7	b6	c7	d2
5					
6					
	2 nd semester				
7	Principles of prevention and control of diseases (non-infectious,	a5	b8	c4	d1,2,7
8	Epidemiologic study (design, interpretation), outbreak investigation, Table (2 x 2)	a 3	b1	c6	d 4,7
9	Disinfection and disinfectant	a4	b5	c3	d1
10	Control of external parasites of veterinary importance	a6	b4	c9	d6



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